

EXHIBIT 4

Cerro Pelado Fire Investigation Report (“Second ROI”)
(pp. 1–230)

CUI

Report of Investigation (ROI)

United States
Department of
Agriculture

Forest Service



Case #: 23-03-IAIP004

Case Name: Cerro Pelado Fire Investigation

Investigating Office: 03

Investigator: (b) (6), (b) (7)(C)

Report Type: Investigation Closed

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This report shall be maintained in accordance with FSM 6270

CUI



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Report of Investigation

CASE NUMBER: 23-03-IAIP004
CASE TITLE: Cerro Pelado Fire Investigation
DATE OF REPORT: 05/10/2023
CASE TYPE: FIRE
PERIOD OF REPORT: 05/10/2023 - 05/10/2023
STATUS: Investigation Closed
REPORTED BY: (b) (6), (b) (7)(C)

STATUTE(S) INVESTIGATED:

FSMHS - FINANCE AND CLAIMS - 6500 - FINANCE AND CLAIMS

PREPARED BY / DATE:

(b) (6), (b) (7)(C) / 05/10/2023

REVIEWED BY / DATE:

(b) (6), (b) (7)(C) / 05/24/2023

APPROVED BY / DATE:

(b) (6), (b) (7)(C) / 05/24/2023

SYNOPSIS OF INVESTIGATION

On April 22, 2022, at approximately 1539 hours, the Cerro Pelado Lookout reported a billowy blue-gray smoke moving east in strong winds to the Santa Fe Interagency Dispatch Center. The reported wildland fire was located in Sandoval County, New Mexico; on the Jemez Ranger District within the Santa Fe National Forest and was named Cerro Pelado.

Two wildland fire origin and cause determination investigations were conducted during the Cerro Pelado Fire. The first investigation was conducted by a State of Washington Department of Natural Resources wildland fire investigator. A second wildland fire origin and cause determination investigation was conducted by USDA Forest Service Law Enforcement and Investigations criminal investigators.

Both investigations identified the same specific origin area. A second specific origin area, located approximately six hundred feet northeast of the original, was identified during the second investigation. The specific origin areas contained an ash pit with burned woody material. The ash pits were created after logging debris was either pushed into piles with the use of equipment or piled by hand and burned.

The initial investigator recorded the cause determination as, "A slash pile burned during the 'Pino West RX' was found in the Specific Origin Area. Due to suppression efforts in the SOA [Specific Origin Area], an analysis of the fire pattern indicator could not be conclusive as to one primary cause. With all the other cause classifications being ruled out, the Cerro Pelado fire has a NWCG [National Wildfire Coordinating Group] Cause Classification of: Human; General Cause: Undetermined; Specific Cause: Origin Destroyed."

The second investigator recorded the cause determination as, "Debris Burning. High wind event exposed embers from hold over fire within slash pile/s. Windblown embers ignited receptive fuels down wind and upslope. USFS [USDA Forest Service] Fire personnel ignited several logging slash/litter piles during [the] Pino West RX. Smoke was observed rising from under ash crust on the outer edge of the pile was documented at the time of the investigation. (48 days after the fire was reported[.])"

A Prescribed Fire Burn Plan was prepared as a Jemez Ranger District, Santa Fe National Forest, district wide pile burn plan which included the Pino West ignition unit. On February 1, 2022, piles were ignited as part of a prescribed pile burn within the Pino West ignition unit. The two specific origin areas were located within the prescribed pile burn. The second wildland fire origin and cause determination investigation established Debris Burning as the cause of the Cerro Pelado Fire.

NARRATIVE

INTRODUCTION

On April 22, 2022, at approximately 1539 hours, the Cerro Pelado Lookout reported a billowy blue-gray smoke moving east in strong winds to the Santa Fe Interagency Dispatch Center. The reported wildland fire was located in Sandoval County, New Mexico; on the Jemez Ranger District within the Santa Fe National Forest and named Cerro Pelado.

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DETAILS

Wildland Fire Origin and Cause Determination and Second Opinion

After the Cerro Pelado Fire started, a wildland fire investigator was ordered for the purpose of conducting a wildland fire origin and cause determination investigation. (b) (6), (b) (7)(C), a wildland fire investigator for the State of Washington Department of Natural Resources, responded and on or about April 28, 2022, began conducting the investigation.

On May 11, 2022, I, USDA Forest Service (FS) Assistant Special Agent in Charge, (b) (6), (b) (7)(C), received an emailed copy of (b) (6), (b) (7)(C)'s Wildland Fire Investigation Report from FS Law Enforcement Officer (b) (6), (b) (7)(C). On or about this same time, I learned that (b) (6), (b) (7)(C), after he had completed the investigation, left a copy of the report where it was reviewed by FS personnel. Soon after, (b) (6), (b) (7)(C), FS Regional Fire Director, informed me after reviewing the report some FS personnel had concerns, most notably, the piles had not been burned at the time the Cerro Pelado Fire was reported. With this information, I requested a secondary origin and cause determination investigation or second opinion to be conducted on the Cerro Pelado Fire.

(Note: "Another wildland fire investigator may be consulted for a second opinion. This can add weight to the conclusion in subsequent proceedings if the second opinion corroborates that of the original wildland fire investigator. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 19, (2016).")

On June 4, 2022, FS Special Agents (SA) (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) arrived in White Rock, New Mexico and began conducting the secondary origin and cause determination investigation for the Cerro Pelado Fire.

(Note: This Report of Investigation (ROI) references the investigative materials provided by (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) for their investigations as well as materials obtained after the conclusion of SA (b) (6), (b) (7)(C) investigation. (b) (6), (b) (7)(C) provided a Wildland Fire Investigation Report, (Exhibit 1 Wildland Fire Investigation Report). SA (b) (6), (b) (7)(C) provided a Wildland Fire Origin and Cause Supplemental Incident Report, (Exhibit 2 Wildland Fire Origin and Cause Supplemental Incident Report).)

Pino West Piles RX

A Prescribed Fire Burn Plan was prepared as a Jemez Ranger District, Santa Fe National Forest, district wide pile burn plan which included the Pino West ignition unit. The physical description of the prescribed fire area was recorded as, "This Jemez District-Wide Pile Burn Plan is a single document which defines and authorizes multiple burning sites. The piles addressed in this burn plan are located throughout the Jemez District, Santa Fe National Forest and Valles Caldera National Preserve. All piles were created by hand or by machine as a result of hazardous fuel removal treatments and vary moderately in size, shape, and composition." (Exhibit 3 Prescribed Fire Burn Plan)

In their reports, (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) referenced piles burned as part of a prescribed burn called the Pino West Piles RX (Pino West RX). The piles located in Township 18 North, Range 3 East, Section 23 (Section 23) were within the Pino West ignition unit.

The WildCAD Incident Card from the Santa Fe Interagency Dispatch Center recorded on February 1, 2022, the completion of fifty acres and on February 19, 2022, "Pino West Piles Rx: Completed ignitions for the whole Pino West RX today for a total of 709 ac [acres]." (Exhibit 3 Prescribed Fire Burn Plan)

SA (b) (6), (b) (7)(C) conducted an interview and onsite visit with FS Fire Management Officer (FMO), (b) (6), (b) (7)(C) . During the interview, FMO (b) (6), (b) (7) described the area where the piles were burned as a bowl on the north side of the ridge above FR 270 and confirmed the piles were burned in January and February 2022 with February 19, 2022, the last day piles were ignited. FMO (b) (6), (b) (7) agreed to have FS Assistant Fire Management Officer (AFMO) and Burn Boss (b) (6), (b) (7)(C) identify the locations for the piles burned over the winter months. FMO (b) (6), (b) (7) showed SA (b) (6), (b) (7)(C) where he thought the origin area for the fire was located. FMO (b) (6), (b) (7) shared that he could not see flames only smoke on the ridge as he arrived on scene. (Note: FMO (b) (6), (b) (7) origin area is referred to as the Estimated Origin in this ROI.) AFMO (b) (6), (b) (7)(C) provided SA (b) (6), (b) (7)(C) a copy of the Prescribed Fire Plan and a map depicting the approximate perimeter for the piles burned during the Pino West RX in Section 23. (Exhibit 3 Prescribed Fire Burn Plan)

On January 31, 2023, FS personnel provided a map depicting the approximate locations for piles burned during the Pino West RX in Section 23 on February 1, 2022. A black in color "X" was drawn on the map depicting the location of the Estimated Origin.

(Note: On page 10 of SA (b) (6), (b) (7)(C) report, the "Unclassified" roads/trails used by the logging contractors were labeled as Trail 1, Trail 2, Trail 3, and Trail 4. See, Exhibit 5 Documents, for the road/trail locations.)

Estimated Origin

The WildCAD Incident Card from the Santa Fe Interagency Dispatch Center recorded on April 22, 2022, at 1539 hours, the Cerro Pelado Lookout reported the Cerro Pelado Fire near FR 270 with an azimuth of 255° at two miles.

Both (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) interviewed the Cerro Pelado Lookout (b) (6), (b) (7)(C). (b) (6), (b) (7)(C) provided photographs of the Cerro Pelado Fire and a copy of the Cerro Pelado Lookout Incident Report was obtained. (Exhibit 1 Wildland Fire Investigation Report and Exhibit 4 Photograph Logs)

On January 31, 2023, I received a Google Earth map created by SA (b) (6), (b) (7)(C) which showed the location for various items of interest related to the investigation. Some of these items of interest included the 255° azimuth shown in red, the location for the Specific Origin Area (SOA), and the location for the Estimated Origin. Both, the Google Earth map, and the map depicting the Estimated Origin, were consistent with the Estimated Origin being placed near the ridgeline above FR 270. The Estimated Origin was depicted near a hilltop identified as X 8654. (Exhibit 5 Documents)

SA (b) (6), (b) (7)(C) received three photographs and one video taken by (b) (6), (b) (7)(C) of the Cerro Pelado Fire. The first photograph, IMG-3162, was taken at 1554 hours, approximately 15 minutes after the fire was reported, and the last photograph, IMG-3165, was taken at 1640 hours, approximately an hour after the fire was reported.

The area of the Estimated Origin and hilltop, X 8654, were visible in the photographs and video taken by (b) (6), (b) (7)(C) However, no smoke column was visible in the Estimated Origin or hilltop, X 8654. Additionally, the Estimated Origin was located at an approximate azimuth of 250° from the Cerro Pelado Lookout Tower. (b) (6), (b) (7)(C)'s azimuth for the reported smoke column was 255°.

In photograph IMG-3162, a distinct portion of a road headed downslope towards Trail 1 was visible to the

left and above the base of the smoke column. In photograph IMG-3163, taken at 1627 hours, the distinct portion of the road was less noticeable with a larger smoke column shown. From the angle the photograph was taken, more landscape was visible to the left of the smoke column providing greater context for the location of the smoke column within the surrounding landscape. (Exhibit 5 Documents)

In photograph IMG-0569, taken by SA (b) (6), (b) (7)(C) from the Cerro Pelado Lookout Tower, the distinct portion of the road, observed in photograph IMG-3162, can be seen traveling down slope and intersecting with Trail 1. (Exhibit 5 Documents)

(b) (6), (b) (7)(C)'s smoke report of two miles and GPS coordinates recorded on the Cerro Pelado Lookout Incident Report, placed the smoke column near the bottom of a canyon and north of the intersection of FR 270 and FR 10DD. Based on the location of the distinct portion road and landscape shown in photographs IMG-3162 and IMG-3163, the base of the smoke column was located further to the southwest than the two miles reported by (b) (6), (b) (7)(C).

The intersection of Trail 1 and FR 10DA was located approximately 2.5 miles from the Cerro Pelado Lookout Tower. On the map, page 10 of SA (b) (6), (b) (7)(C) report, a red azimuth line was depicted near the intersection. SA (b) (6), (b) (7)(C) provided the following information regarding the fire progression near the intersection of Trail 1 and FR 10DA:

- "SA (b) (6), (b) (7)(C) began following advancing fire indicators from the probable origin area while SA (b) (6), (b) (7)(C) drove to the Cerro Pelado Lookout Tower. Once there SA (b) (6), (b) (7)(C) was able to locate SA (b) (6), (b) (7)(C) who was wearing a green traffic vest and was standing on his pickup box via a spotting scope. SA (b) (6), (b) (7)(C) had parked his truck near the center of the head of the fire as it intersected Trail 1 and FS 10DA. SA (b) (6), (b) (7)(C) confirmed SA (b) (6), (b) (7)(C) location was consistent with Fire Lookout (b) (6), (b) (7) observations and photographs taken on April 22nd [2022]. SA (b) (6), (b) (7)(C) took several photographs from the tower depicting SA (b) (6), (b) (7)(C) location in relation to the initial smoke observation at a heading of 255° taken by (b) (6), (b) (7)(C)." (Exhibit 4 Photograph Logs)

Both (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) documented advancing fire pattern indicator vectors which supported a fire originating further to the southwest of (b) (6), (b) (7)(C)'s reported two miles. The advancing fire pattern indicator vectors were also consistent with the observation made by SA (b) (6), (b) (7)(C) at the intersection of Trail 1 and FS 10DA. SOA1 was located approximately three miles from the Cerro Pelado Lookout Tower and consistent with (b) (6), (b) (7)(C)'s 255° azimuth.

In a sketch/diagram, (b) (6), (b) (7)(C) recorded a reference point (RP2) and a lateral fire vector near where the Estimated Origin was identified, (Exhibit 1 Wildland Fire Investigation Report). On the map, page 10 of SA (b) (6), (b) (7)(C) report, a lateral fire progression was depicted near where the Estimated Origin was identified, (Exhibit 2 Wildland Fire Origin and Cause Supplemental Incident Report and Exhibit 5 Documents).

Both investigations determined the fire progression advanced from SOA1 in a northeasterly direction with a lateral fire progression on the right flank of the advancing fire progression. The Estimated Origin was shown to be in the lateral fire progression on the right flank of the advancing fire. Neither investigation supported the Cerro Pelado Fire originating at the Estimated Origin identified by FMO (b) (6), (b) (7)(C).

General Origin Area/Specific Origin Area - (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C) provided the following information regarding his assessment of the General Origin Area (GOA) and the SOA:

- "8.) Because many of the slash piles were located at or near the bottom of the ridges, they were in locations conducive to fire spread into adjacent uphill fuels. Therefore, it was important to carefully walk around each slash pile and make note of the [Fire Pattern Indicators] FPIs to see if any direct path of advance had come from the slash piles. With the daylight remaining, I excavated and documented eleven of the slash piles and found heat in three additional slash piles. Because the

heat was within the top 12 inches of ash, dirt, and mixed char/wood, I could not determine if the remaining fuel from the RX burns in January and February had reignited from the Cerro Pelado fire, or had remained as holdover heat underground. In nearly all of the slash piles, recent disturbance, probably from fire crew hand tools, suggested that fire suppression resources had recently worked the piles for any remaining heat. By the time I arrived on April 28, it was impossible to tell if the slash piles had been worked before the Cerro Pelado fire started, or after. Interviews conducted between April 29 and May 7 revealed that the slash piles in the GOA had been checked by fire crews as recently as April 20 and also during the fire suppression period of April 22 to April 28.

- 13.) By following these vectors down-ridge, a smaller area of origin emerged as the advancing indicators narrowed to about 30 feet. Beyond this point, I could no longer narrow down the fire's path of advance due to the area being disturbed by suppression work. From the disturbance of the ground, it appeared that one or more firefighters had worked the area with hand tools to excavate and extinguish heat and then construct hand line using this origin area as an anchor point. At the bottom of the ridge, I was able to sketch a Specific Origin Area (SOA) of about 30 feet by 25 feet. In the center of this SOA was the slash pile with heat that I had observed in paragraph 8 above. Before beginning a search of the SOA for FPIs and evidence, I photographed the area in detail. As I mentioned before, because the area had been worked recently by firefighters, the few FPIs that were visible (protection) were not reliable due to their having been moved from the original locations.
- 14.) I setup an evidence grid search of the SOA, and methodically covered each square foot visually, scanning for any evidence of a competent ignition source. During this grid search, the only evidence discovered was the holdover heat located between the surface and 12 inches below. I excavated most of the slash pile down to 24 inches, to ensure that holdover heat could not be found any deeper, but no other heat was located. Because of the location of the slash pile in the SOA, and the presence of substantial heat excavated several days after the start of the fire, this cause became the primary focus of my interviews. Supplemental Reports from (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) attached describe extensive checking and 'cold-trailing' of the slash piles in the weeks after the RX burn and up to April 20, when the slash piles were checked again for heat by fire crews. The Wild CAD log of the RX burns named 'Pino West' is attached to this report."

General Origin Area/Specific Origin Area - SA (b) (6), (b) (7)(C)

SA (b) (6), (b) (7)(C) provided the following information regarding the assessment of the GOA and the SOA:

- "SA (b) (6), (b) (7)(C) located several mechanical logging slash piles that had been previously burned along Trail 2 and 3. SA (b) (6), (b) (7)(C) observed advancing fire burn indicators from several off [of] the piles, particularly those along the north side of Trail 2. SA (b) (6), (b) (7)(C) was unable to determine if the advancing fire occurred independently from each of the burn piles on the day the Cerro Pelado fire was reported or if advancing fire from a single ignition source further to the west-northwest burnt into each of the downwind and upslope piles thereby reigniting remaining fuels in the piles. He continued to follow macro fire vectors between Trail 2 and 3 back to an area just south of FS 10E1.
- SA (b) (6), (b) (7)(C) requested SA (b) (6), (b) (7)(C) to survey the area he had identified. SA (b) (6), (b) (7)(C) independently walked a similar route and agreed with SA (b) (6), (b) (7)(C) observations. Both investigators relocated their vehicles to an area near the end of FS 10E1, the start of Trail 1 and 2, and a small dugout water pond west of the intersection. There the investigators observed a small deck of unburned processed ponderosa pine logs and the remains of a burned mechanical logging slash pile. Investigators observed the remains of numerous partially consumed larger diameter processed log ends, white ash near the center of the pile, and an ash berm near the southwest side of the pile. Smoke as [was] observed rising from the ash berm, and heat was felt radiating from this location. SA (b) (6), (b) (7)(C) estimated the ash berm was 5-6 feet wide, 20 feet long, and several feet deep.
- The pile was constructed and burnt immediately adjacent to a slope of an untreated stand of timber, predominately consisting of small and larger diameter ponderosa pine.
- This area near the center of the ridge line was identified [as] the initial run. The right flank was less pronounced and had a thinner transition due to the wind direction and proximity to Trail 2 where fuels

were significantly treated vs. the fuels adjacent to Trail 3. The investigator returned to the eastern edge of the burnt mechanical pile where he had observed smoke rising from an ash berm. The burn pile and actively smoldering ash berm was identified as the most probable competent ignition source."

SA (b) (6), (b) (7)(C) identified a second SOA, SOA2, which also contain an ash pit and burned woody material. SOA2 was located approximately 600 feet northeast of SOA1 along FR 10F near the intersection of FR 10E1 and Trail 3. SA (b) (6), (b) (7)(C) provided the following information about SOA2:

- "The investigator attempted to examine the smoldering ash berm however was unable to fully excavate the full depth of the berm due to the amount of heat radiating from the deepest parts. The investigator inserted a metal spade closest to the center he could safely and physically reach. He marked the shaft of the shovel with sharpie in order show the depth at place of insertion. Upon removing the metal spade SA (b) (6), (b) (7)(C) was unable to touch the shaft and or blade of the shovel with a leather glove on his hand due to the extreme temperature. After the shovel cooled SA (b) (6), (b) (7)(C) was able to measure the sharpie mark at almost 2 feet. The overall depth at the deepest location was like just over 3 feet deep.")

SA (b) (6), (b) (7)(C) interviewed (b) (6), (b) (7)(C), the president of TC company, the logging company that held the stewardship contract in the area. SA (b) (6), (b) (7)(C) provided the following information:

- (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) drove to the intersection of FS [FR] 10E1 and Trail 2. There (b) (6), (b) (7)(C) explained that he and the previous wildland fire investigator had visited this area and believed it was the likely origin of the Cerro Pelado Fire. (b) (6), (b) (7)(C) confirmed the pile at this location was built by his crew during logging and stewardship related work. (b) (6), (b) (7)(C) explained that the contents of the pile were tops of the processed trees, as well as brush and logging litter that had been push into the pile."

Both (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) identified the same SOA, SOA1, which contained an ash pit and burned woody material, located at the base of a slope with untreated vegetation above the ash pit. SOA1 was located in between Trails 2 and Trail 3 near the intersection of FR 10E1, Trail 1, and the dirt tank. SA (b) (6), (b) (7)(C) identified a second SOA, SOA2, which contained an ash pit and burned woody material. SOA2 was located approximately 600 feet northeast of SOA1 along FR 10F near the intersection of FR 10E1 and Trail 3.

V and U Fire Pattern Indicators/Overall Fire Progression

(Note: V and U Fire Pattern Indicators – This is the overall V or U shape associated with typical wildfire progression in the early stages of the fire. Lateral transition zones form exterior perimeter V or U shape with an advancing vector in between. The lateral transition zones typically get further apart as the advancing fire continues unless barriers, fuels changes, or suppression action affects the fire's ability to spread. The ignition area is generally located in an area of less intense burning near the cup of the U or apex of the V. "NWCG Handbook", PMS 412, NFES 1874, Chapter 1B, page 94, (2016).)

(b) (6), (b) (7)(C) referenced a U-shaped macro-fire pattern indicator within the heel of the Cerro Pelado Fire and provided the following information:

- "I noticed on my GPS that I was almost exactly in the middle of the heel I had identified during the perimeter walk. At this location, I was approximately 1/4 mile from the northern, southern and western edges of the fire footprint. By pulling together the fact pattern of indicators and vectors I had accumulated so far, I could now hypothesize that I was very near the middle of a U-shaped macro-indicator. This shape formed from a combined influence of wind and topography on the available fuels to make a distinct U or V-shaped pattern when looking from above."

SA (b) (6), (b) (7)(C) interviewed National Park Service (NPS) Assistant Engine Captain (b) (6), (b) (7)(C). (b) (6), (b) (7)(C) confirmed he was on engine E-692 and was the only one to hike into the heel and scout the fire. SA (b) (6), (b) (7)(C) provided the following information:

- (b) (6), (b) (7)(C) explains he took three videos during the scouting mission. (1 upslope of the heel, 1 in the drainage near the heel, and 1 along the ridge line above FS 270). (b) (6), (b) (7)(C) described active fire in and originating at several burn piles in the area.
- Video "IMG_3989" was taken from (b) (6), (b) (7)(C)'s iPhone 12 at 17:11 on April 22, 2022 at 35.77290°N, 106.59690°W, "Image_3990" was taken at 17:17, at 35.77470°N, 106.59790°W, and "Image_3991" was taken at 17:32, at 35.77330°N, 106.58920°W.
- Video in Image_3989 depicts unburnt fuel on the southern edge of the burn pile east of Trail 2. The pile has a significant amount of white ash near the center, indicating the combustible fuels had recently burned and still likely contain a significant amount of heat. Smoke is seen rising from burning wooden material on the eastern edge, as well as from charred piece of wood within the perimeter of the burn pile. There is no signs of burnt materials and or active fire on the west side of Trail 2. Heavy black smoke is seen rising from the drainage to the north.
- Video in Image_3990 depicts active fire with 5-7 foot lengths burning in small stands of ponderosa pine in a small drainage east of FS 10F/and an undesignated trail that connects with Trail 3. Immediately down drainage is the remains of a burn pile with white ash near its center, numerous partially consumed logs and active fire near its southern edge. The slope to the south has some active fire with thick white smoke seen rising from the length of the base of the slope into the timber towards the small ridgeline above.
- Video in Image_3991 depicts the remains of a burn pile contain again a significant amount charred and burning materials on the east of (b) (6), (b) (7)(C)'s position. (b) (6), (b) (7)(C) is seen kicking the charred material and surface soils showing the speed and intensity of the wind." (Exhibit 2 Wildland Fire Origin and Cause Supplemental Incident Report, page 13 of 26, video locations)

(Note: The "remains of a burn pile with white ash near its center" observed in video Image_3990 is the location for SOA2. SA (b) (6), (b) (7)(C) provided the GPS coordinates of N35.77464-W106.59782 for SOA2.)

In video Image_3989, there was no fire observed burning south of Trail 2 (which SA (b) (6), (b) (7)(C) later stated as left of Trail 2). In video Image_3990, there was no fire observed burning on the west side of FR 10F. When using Trail 2 as the right flank of the fire and FR 10F as the left flank of the fire, a V-shape fire pattern progression was visible when observed on a map. SOA1, located near the dirt tank, was near the apex of the V.

On or about May 3, 2022, AFMO (b) (6), (b) (7)(C) provided (b) (6), (b) (7)(C) a sketch of the fire progression during the initial attach period. The sketch depicted the advancing fire progression to the northeast/east and backing toward the southwest from the area of the dirt tank and FR 10F. The U-shaped fire pattern progression was observed on the sketch at the heel of the fire. The sketch was consistent with the findings of the two investigations.

A blue arrow was depicted on the sketch which appears to represent the backing fire vector. The tail end of the blue arrow was depicted at the approximate location for SOA2. This was also the approximate location for a pile depicted on the map as being burned during the Pino West RX in Section 23 on February 1, 2022. (Exhibit 5 Documents)

Cause Determination

(Note: The Wildland Fire Investigative Report shows the terms Excluded, Included, and Possible. The form does not refer to the term Probable which is used by the FS. The FS Wildland Fire Origin and Cause Supplemental Incident Report form provides the following information:

- POSSIBLE: At this level of certainty, the hypothesis can be demonstrated to be feasible but cannot be declared probable. If two or more hypotheses are equally likely, then the level of certainty must be "possible."
- PROBABLE: This level of certainty corresponds to being more likely true than not. At this level of certainty, the likelihood of the hypothesis being true is greater than 50%.
- EXCLUDED: A determination of "excluded" should be used if the cause is not possible or probable.

- An undetermined fire cause may later be changed to cause determined if new evidence becomes available.”)

(b) (6), (b) (7)(C) in the Wildland Fire Investigation Report, reports the cause as inconclusive, “After excluding all other possible ignition sources and reviewing the available evidence, the cause of the Cerro Pelado wildfire was not able to be determined due to the destruction of the origin area through suppression efforts.” Debris Burning was included as a Possible cause. A slash pile, described as 30 feet by 25 feet and burned during the Pino West Piles RX, was found in SOA1. During a grid search of SOA1, the only evidence discovered was the holdover heat located between the surface and twelve inches below. A pile, excavated during the assessment of the GOA, contained holdover heat at a depth of approximately twelve inches where several shovels full of smoldering charcoal was uncovered. The charcoal ignited and burned with open flame when exposed to the wind.

(Note: Debris Burning - Industrial debris burning, such as logging slash or other forest industry pile burning, can develop ash crusts similar to that described in the section on campfires, creating residual heat for months. Often, by the time these larger industrial burn piles are exposed and become active again, forest debris such as leaves and needles have covered any attempts at control lines around the piles, allowing the fire a path of escape by direct burning or windblown ember. There are numerous documented instances where these fires having escaped the following spring after being originally burned the preceding fall. This may be due to a mixture of dirt and ash which insulates the hot embers within the debris that is piled by these activities. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 212, (2016).)

Campfire, Smoking, and Incendiary were also included as Possible causes. The report further documented that no evidence of these cause categories was found in SOA1. The investigator was observant for any human caused evidence of ignition, but found none.

(Note: Fires classified as Undetermined should not be categorized as arson [Incendiary] but may require repeated review to see if new evidence can assist in establishing a cause. “NWCG Handbook, PMS 412, NFES 1874, Chapter 7, page 299, (2016).)

SA (b) (6), (b) (7)(C) in the Wildland Fire Origin and Cause Supplemental Incident Report, established Debris Burning as the cause of the Cerro Pelado Fire.

(Note: Debris Burning - Wildland fires caused by debris burning activities including residential (pile, barrel, hazard reduction) and industrial (logging operations, land clearing, agricultural, forestry, right-of-way hazard reduction, or other controlled burning). “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 211, (2016).)

A Prescribed Fire Burn Plan was prepared as a Jemez Ranger District, Santa Fe National Forest, district wide pile burn plan which included the Pino West ignition unit. The burn piles were created by “hand or by machine” and the burn piles located in Section 23 were within the Pino West ignition unit. The WildCAD Incident Card recorded on February 1, 2022, the completion of fifty acres during the Pino West RX and maps depicted the perimeter and location for the piles burned. Two SOAs were identified within the perimeter of the prescribed burn and located at the heel of the Cerro Pelado Fire. The Estimated Origin was located in an area of lateral fire progression and photographs showed there was no smoke column in the Estimated Origin. Both investigations identified SOA1, which contained an ash pit created after logging debris was pushed into a pile with the use of equipment and burned. The ash pit and actively smoldering ash berm were reported to be the most probable competent ignition source. An escaped hold over fire was determined to be the cause of the Cerro Pelado Fire.

PARTICIPATING INVESTIGATORS:

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

EXHIBITS

EXHIBIT #	TITLE
1	Wildland Fire Investigation Report
2	Wildland Fire Origin and Cause Supplemental Incident Report
3	Prescribed Fire Burn Plan
4	Photograph Logs
5	Documents

EXHIBIT #: 1

TITLE: Wildland Fire Investigation Report

CASE NUMBER: 23-03-IAIP004



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION REPORT

Case File Number

NM-SNF-000049

Other Related No.

221--IDA

INCIDENT INFORMATION

Incident Name: CERRO PELADO	WildCAD Incident No. SNF 2022-49	Incident Date: 4 / 22 / 2022
Program Index: <input checked="" type="checkbox"/> 221 <input type="checkbox"/> 222	Project Code: IDA	Region Fire No. 00049
Investigation Report By: (b) (6), (b) (7)(C), INVF, Washington DNR		Reporting Office: USFS - SNF
Other Agents/Officers:		Case Ref. No.

Origin Location

Region: Santa Fe National Forest	District: Jemez Ranger District	County: Sandoval County
Lat. (D° dM'): N 35° 46.420'	Long. (D° dM'): W -106° 35.922'	Twp: 18 N Rng: 3 <input checked="" type="checkbox"/> E <input type="checkbox"/> W Sec: 23 ¼ ¼: SWSW
Ownership: <input checked="" type="checkbox"/> Private <input type="checkbox"/> DNR <input type="checkbox"/> WDFW	Federal: <input checked="" type="checkbox"/> USFS <input type="checkbox"/> USFW <input type="checkbox"/> BLM <input type="checkbox"/> NPS <input type="checkbox"/> BIA <input type="checkbox"/> Other:	
Jurisdiction: <input type="checkbox"/> WA DNR <input checked="" type="checkbox"/> Federal <input type="checkbox"/> WFS: <input type="checkbox"/> Other:	Protection: <input type="checkbox"/> FFPA <input type="checkbox"/> N/A	

Regulations and Restrictions

Burn Ban in Effect: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Fire Danger Rating: <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input checked="" type="checkbox"/> Very High <input type="checkbox"/> Extreme	
IFPL Zone: <input type="checkbox"/> N/A	IFPL: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	Fire Tool Inspection: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Violation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Type: <input type="checkbox"/> IFPL <input type="checkbox"/> Burn Ban <input type="checkbox"/> Burn Permit <input type="checkbox"/> Other:	
Citation Issued: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Citation Number:	Issued By:
Referral: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Referral to:	Date: / /19

Fire Behavior Conditions

Red Flag Warning: <input checked="" type="checkbox"/> Yes (attach Red Flag Warning) <input type="checkbox"/> No	Lightning: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Weather Source: <input type="checkbox"/> On-Scene Observations <input checked="" type="checkbox"/> WildCAD	<input checked="" type="checkbox"/> RAWS Station: Jemez, NM <input type="checkbox"/> Other:			
Temperature °F: 70	Relative Humidity %:	Wind Direction: N/NE 218°	Wind Speed (mph): 28	Gusts: 36
Aspect: S	Slope %: 10-30	Elevation: 8400'	Fuel Type at Origin: grass, shrub, mixed conifer	
Character of Fire: <input checked="" type="checkbox"/> backing <input checked="" type="checkbox"/> creeping <input checked="" type="checkbox"/> smoldering <input checked="" type="checkbox"/> running <input checked="" type="checkbox"/> torching <input checked="" type="checkbox"/> spotting <input checked="" type="checkbox"/> crowning				

Sequence of Events

Estimated Ignition: / /2022 at : <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM (For Incendiary Cases only)	
Fire Reported: 4/ 22 /2022 at 15: 42 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Reported by: (b) (6), (b) (7)(C), Cerro Pelado Lookout
Origin Protected: 4/ 28 /2022 at 14: 00 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Protected by: (b) (6), (b) (7)(C), INVF
Investigator Notified: 4/ 26 /2022 at 16: 00 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Requested by: USFS
Origin Released: 4/ 27 /2022 at 18: 30 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Released by: (b) (6), (b) (7)(C), INVF

SUMMARY

- On April 22, 2022 a wildfire began in the Jemez Ranger District on Federal land managed by the US Forest Service (USFS). The nearby Cerro Pelado Lookout (CPLO) called in a smoke report 15:42, and Initial Attack resources were on scene within 20 minutes of the first smoke report. Fueled by high winds from the southwest, the fire grew quickly and advanced to over 400 acres by 18:00. Additional ground, overhead, and aviation resources were immediately ordered as Initial Attack forces focused efforts towards public safety, then began aggressive suppression work.
- Over the next two weeks, the fire's footprint spread to over 40,958 acres and destroyed 3 residential structures and several non-residential structures on private property. The fire also caused significant damage to transmission and distribution (T&D) infrastructure managed by the Jemez Mountains Electric Co-Op under easement with the USFS. One minor firefighter injury was reported with no lost time.
- A Wildland Fire Investigation was requested and INVF (b) (6), (b) (7)(C) began an origin and cause investigation on April 28. Fire pattern indicators were identified, analyzed, sketched and photographed. An analysis of these

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indicators led to a Specific Origin Area (SOA) that was protected, documented, and released by INVFC (b) (7)(C). Due to suppression efforts in the SOA, an analysis of the fire pattern indicators could not be conclusive as to one primary cause. With all other cause classifications being ruled out, the Cerro Pelado fire has an NWCG Cause Classification of: Human; General Cause: Undetermined; Specific Cause: Origin Destroyed.

- 4.) Although suspicious fire causes have been reported in the Santa Fe National Forest, no persons of interest were observed by Firefighters during the Initial Attack period. Two vehicles have been seen in the area corresponding with the times of the starts and have been referred to USFS Law Enforcement Officers. No other persons of interest were referred to USFS LE as a result of this investigation.

Cause Determination

Cause Determination		
Code:	E = Excluded; I = Included; P = Possible (if Included or Possible is used, further explain in the Details Section below).	
E	Lightning	Strike activity. No lightening was recorded or observed in the two weeks preceding the fire. No evidence of lightning scarred trees or shrubs were found in the origin. Lightning maps are attached for reference.
P	Campfire	Uncontrolled/Unattended/Escaped/Rekindle. A campfire may have been present in the origin before suppression efforts damaged the scene. Many other recreational campfires have been observed in the area by Forest staff, usually associated with turkey hunting in the spring and big game hunting in the fall.
P	Smoking	Tobacco: Cigarette, Cigar, Pipe; Cannabis; Paraphernalia: Matches, Pipes, Filters, Clips, etc. Although no evidence of smoking was located during this investigation, the Probability of Ignition from smoking is very likely based on the RH low of 8% and fine dead fuel moisture of 3.5%.
P	Debris Burning	Agricultural, Burn Barrel/Incinerator, Dumpsite, Garbage, Pile/Slash, Prescribed, Holdover, Unattended/ Uncontrolled. A slash pile burned during the 'Pino West RX' was found in the Specific Origin Area (SOA).
P	Incendiary	Arson: Matches, Cigarette, Lighter; Time-Delay Ignition Device: Rope, Rubber Band, Candles, Wire. No evidence of incendiary device was found but ignition from an incendiary source (aka 'hot set') was possible given the easy road access into the origin.
E	Equipment Use	Operation Of Mechanical Equipment, Brakes, Catalytic Converter, Exhaust/Exhaust System Particle, Sparks, Fuel, Fluids, Lubricant, Friction, Electrical, Grading, Harvesting, Land Clearing, Logging, Mowing, Rock Strike, Mechanical Breakdown/Malfunction, Vegetation Buildup on Hot Surface. No evidence of ignition from equipment use was discovered, nor was equipment used in this area in the days previous to the fire.
E	Railroad	Railroad Operation/Personnel/Rolling Stock: Brakes, Equipment, Exhaust/Carbon Particle, Track/Right-Of-Way Maintenance. No railroad operations exist in the origin area.
E	Children	Ignition Activities Associated with Children – 12 Years of Age or less: Matches, Lighter. No evidence of ignition associated with children were observed.
E	Miscellaneous	Power Line, Fireworks, Cutting, Welding, Grinding, Firearms Use, Exploding Target, Spontaneous Heating, Coal Seam Fire, Electric Fence, Refraction/Reflection/Magnification, Blasting, Flare, Flare Stack/Pit Fire, Flying Lantern, Wind Turbine, Outdoor Wood Burning Furnace, Structure. No evidence of miscellaneous causes were found.

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INVESTIGATION**DETAILS**

1). I, (b) (6), (b) (7)(C), Wildland Fire Investigator with the Washington State Department of Natural Resources (WaDNR), was dispatched to the Cerro Pelado Fire as the Origin and Cause Investigator. After being briefed by the Liaison Officer and Operations Section Chief at the Incident Command Post, I arrived on scene at 0730 (hereinafter all times are to be considered approximate unless stated otherwise) on April 28, 2022. By the time I had arrived, the fire's head was at least 4 miles to the east, and I could safely navigate the heel without interrupting suppression work. In accordance with WaDNR Wildfire Investigations procedure, I began my investigation by circumnavigating as much of the heel as possible on foot. As an anchor point, I began the perimeter walk at the farthest north point of the heel, where FS 10AE intersects with the fire's footprint. Starting in a 'clockwise' manner, I walked east for $\frac{1}{2}$ mile and then south for $\frac{1}{2}$ mile to look for a first impression of the fire pattern indicators (FPIs) and fire pattern vectors (vectors). With a slope of 15-25%, an excess of dry ground fuels (in the form of mixed conifer leaf litter, and gamble oak mixed with grass), and consistent SW winds, the fire had every opportunity to exhibit extreme fire behavior. The FPIs of angle of char and foliage freezing were consistent and prevalent on ponderosa pines throughout this area of the heel as indicated in the Photo Log images: 0175, 0177, 0130, 0127. The FPIs in this area (Reference Point 1 (RP1) on the Regional Fire Scene Sketch) demonstrated widespread torching and catastrophic crown-topping. In this vicinity, the fire's behavior would be characterized as extreme advance to the northeast, as indicated by the large red arrows on the Regional Fire Scene Sketch.



Photo 0144: aspect SW, from RP 1

2.) I continued my perimeter walk of the heel to the south along the top of the ridge. I continued to notice consistent angle of char on ponderosa pines and quaking aspens, making note of these FPIs and the direction of the fire's movement, to within 90°, when it reached that particular place. This direction of travel is also

known as a fire vector. The fire vector along the entire ridge top to the south of RP1 was northeast, based on an observation of several FPIs of protection, angle of char and foliage freezing on ponderosa needles. Examples of these FPIs are documented in the Photo Log as 0113, 0117, and 0119. Compare and Contrast photos of location specific FPIs are in the photo log as 0273 to 0274.



Photo 0109: aspect SE, foliage freezing of ponderosa pine needles at RP 1

3.) As I intersected FS 270 and continued south, the FPIs started shifting towards lower intensity lateral vectors. The crown torching became less frequent, and in many places along the base of ridges the fire was still actively backing downhill into very dry needle and leaf litter. This creeping of the fire, often with open flame lengths of less than 1', was prevalent along the south side of the heel. The exceptions were the areas along FS 270 where suppression work had extinguished with water and/or hand line. Also along FS 270 were several slash piles on both east and west sides of the road. On the tops of each slash pile I observed significant uncompressed white ash, indicating that the unburned fuel (slash from a fuels reduction thinning) had reignited recently with the intense heat that swept through the area. I made a note to ask the area FMO about the dates of the slash pile burning, and subsequent checking of the piles for heat.

4.) After rounding the southern heel of the fire, I followed the fire's footprint to the northwest until intersecting with FS 10. Along the entire roadway were consistent backing FPIs, and active fire behavior with low intensity consumption into ground fuels. I sketched these indicators and walked the edge of the fire's footprint northeast until arriving at my original starting location. The FPI's along the northwest edge of the fire were also exclusively backing, and was consistent with the briefing I had received from the Ops Section

Chief the night before. In accordance with WaDNR procedure, I reversed my perimeter walk of the fire's edge and continued sketching and photographing FPI's while thoroughly searching for evidence of a competent ignition source. I completed a counterclockwise walk of the heel's perimeter and used FS 270 as the eastern boundary of the heel in my working hypothesis of the fire's origin.

5.) After returning back to RP 1 on April 29, I felt confident from an analysis of the perimeter FPIs that I was near the center of the fire's early advance. In order to confirm this hypothesis, I walked in a zig-zag pattern from northeast to southwest, following the path of advance until reaching a transition zone of lower intensity fire behavior. These areas of lateral transition typically contained discolored ponderosa needles through desiccation from heat, as indicated in photo 0179 below. In these lateral areas of transition, the FPIs would begin to shift from a NE fire spread to a more north/northwest vector. On the southeast side of the advancing area, the converse was observed. These FPIs of protection and angle of char are documented in the Photo Log as 0195, 0196.



Photo 0179, aspect NE, transition zone near the northern edge of the fire at intersection with FS 10DB

6.) While walking down the north side of one ridge into an area of later transition, I observed a lightning-scarred tree that had been scorched entirely by the fire. This tree is labeled RP2 on the Regional Fire Scene Sketch and documented with photos 138, 139, 141, and 142 in the Photo Log. As the first competent source of ignition I had observed so far, I proceeded carefully around the tree to document any associated FPIs. Because of the high level of consumption around the tree, no protection or angle of char were visible. On the

south side of the lightning ponderosa was significant white ash from complete consumption of heavy ground fuels. On the uphill and downwind side of the tree were very few FPIs, but the fire's intensity around this zone of transition led to my hypothesis and eventual conclusion that the Cerro Pelado fire had already been burning at a level of high intensity when it reached this tree. Also, it had most likely been struck and killed by lightning some years previously as indicated by the higher degree of charring and consumption compared with nearby ponderosas still alive when the fire came through on April 22.



Photo 0139, aspect NE, at RP 2, this ponderosa with spiral lightning scar was excluded as a potential source of ignition

7.) I continued walking the path of advance to the southwest in a zig-zag pattern until the advancing indicators eventually narrowed to the tops of three small ridges. These ridges were separated from one another by two draws, or dry gullies. In each of the draws was a number of slash piles and ponderosa log decks that had burned recently. I sketched the location of each slash pile and marked each by GPS. With my fire tool, I excavated the surface of each slash pile for holdover heat down to approximately 12 inches. Only one slash pile contained heat below the surface. I continued to excavate the slash pile by hand and uncovered about 10 shovels full of smoldering charcoal. When this material was exposed to the wind, it readily ignited and burned with open flame. I marked the location of this slash pile and continued with my evaluation of the FPIs to delineate a General Origin Area (GOA).

8.) Because many of the slash piles were located at or near the bottom of the ridges, they were in locations conducive to fire spread into adjacent uphill fuels. Therefore, it was important to carefully walk around each slash pile and make note of the FPIs to see if any direct path of advance had come from the slash piles. With the daylight remaining, I excavated and documented eleven of the slash piles and found heat in three additional slash piles. Because the heat was within the top 12 inches of ash, dirt, and mixed char/wood, I could not determine if the remaining fuel from the RX burns in January and February had reignited from the Cerro Pelado fire, or had remained as holdover heat underground. In nearly all of the slash piles, recent disturbance, probably from fire crew hand tools, suggested that fire suppression resources had recently worked the piles for any remaining heat. By the time I arrived on April 28, it was impossible to tell if the slash piles had been worked before the Cerro Pelado fire started, or after. Interviews conducted between April 29 and May 7 revealed that the slash piles in the GOA had been checked by fire crews as recently as April 20 and also during the fire suppression period of April 22 to April 28.



Photo 0152, aspect NW, slash pile typical of the others in the area

9.) The following day on April 30, I returned to the area of the slash piles to complete my walk into the path of advance in order to identify a General Origin Area (GOA). With advancing FPI's of angle of char, protection, and freezing at the tops of each ridge, it became important to work each ridge separately in order to narrow down the path of advance. While walking up and down the ridges, still heading in a southwest direction overall, the FPI's on the northern-most and southern-most ridges transitioned to lateral and backing fire

indicators as I approached a depression where the ridges and draws seemed to converge. On the south and west sides of this low spot were steep slopes with significant backing down to the bottom of the hills. In the depression was at least an acre of unburnt forest litter and grasses that stood out like a sore thumb. In my experience, it is very rare to find so much unconsumed fuel in the middle of a large fire's heel. I noticed on my GPS that I was almost exactly in the middle of the heel I had identified during the perimeter walk. At this location, I was approximately 1/4 mile from the northern, southern and western edges of the fire footprint. By pulling together the fact pattern of indicators and vectors I had accumulated so far, I could now hypothesize that I was very near the middle of a U-shaped macro-indicator. This shape formed from a combined influence of wind and topography on the available fuels to make a distinct U or V-shaped pattern when looking from above.

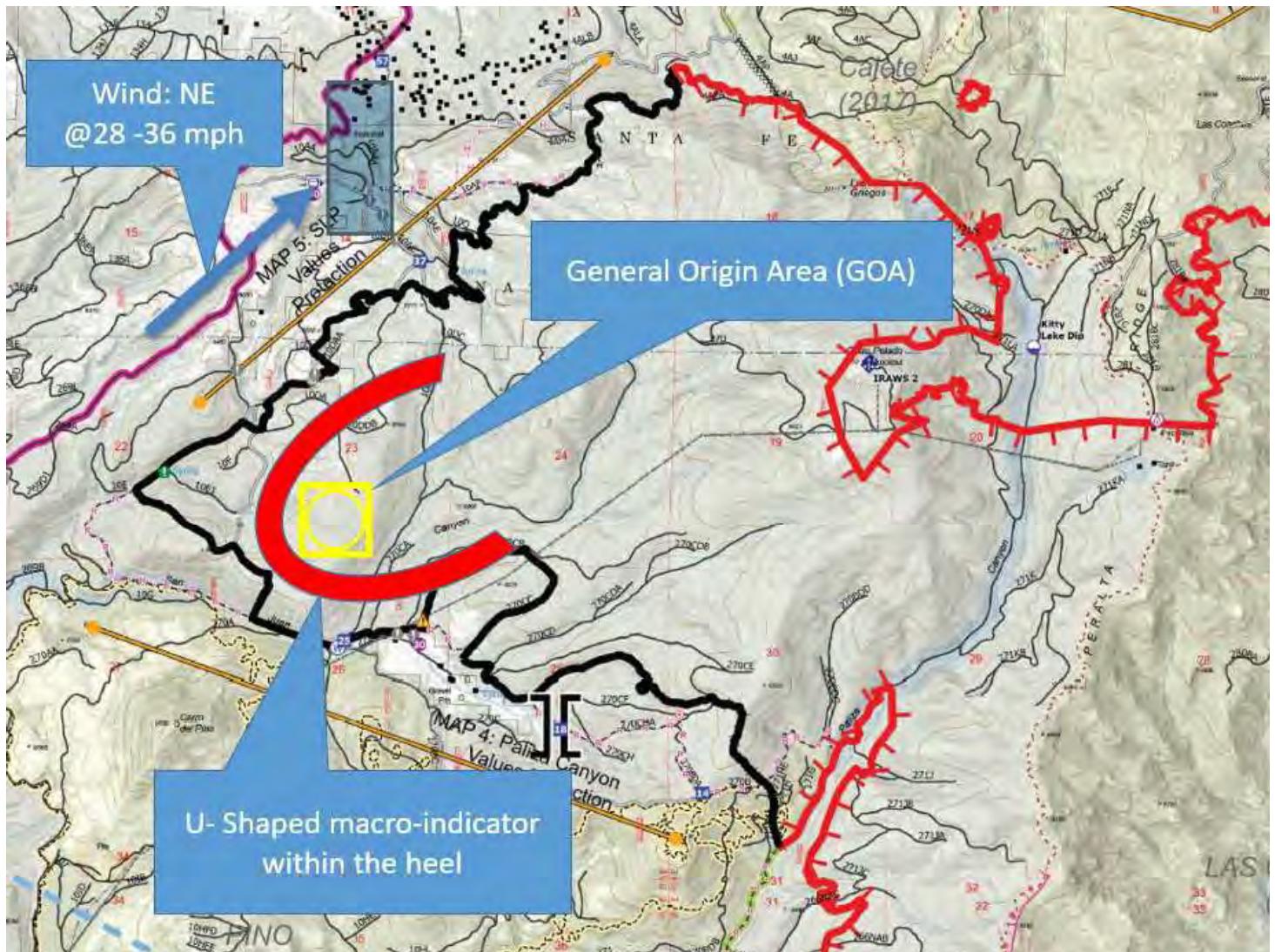


Illustration of the U-shaped macro-indicator at Cerro Pelado fire. This Fire Pattern Indicator (FPI) occurs when wind, topography, and fuels come into alignment. In this case, to the NE during the first few hours of the incident.

10.) In order to narrow down the GOA, I began circling the area and re-sketching the FPIs in more detail, taking photographs of example FPIs as I went. While the northern and southern ridges contained significant backing indicators of angle of char (also known as a ‘barber chair’), the central ridge contained predominantly advance indicators with some backing towards the bottom of the ridge slopes. Using these backing indicators as a guide, I was able to narrow down the GOA to the area at the bottom of the central ridge. This identified GOA measured roughly 200 feet by 100 feet, or about 1/2 of an acre.



Photo 0130, aspect NW, angle of char on ponderosa, located on northwest slope of ridge immediately north of GOA

11.) Next, I started my investigation of the GOA with a clockwise perimeter walk while pin flagging the FPIs. My next goal in the investigation was to generate a smaller footprint of fire origin, known as a Specific Origin Area (SOA). During both the clockwise and counterclockwise perimeter walks I observed no evidence of a competent ignition source. The FPIs of advance were all located at the NE corner of the GOA, while the area to the southeast, south, and southwest of the GOA contained a large area of unburned fuel described in paragraph 8. This island of unburned fuel connected to road FS 10E1 which served as the main road access into the GOA. With immediate road access to the GOA and no other lightning trees nearby, I was especially observant for any human caused evidence of ignition, but none was found.

12.) As I worked my way SW through the path of advance, I placed red pin flags to indicate FPIs of advance, yellow pin flags for lateral FPIs, and blue flags for backing indicators. A clear path of advance began to emerge that was about 50 feet wide and leading down-ridge. FPIs of protection, angle of char, sooting, staining, and cupping on low stumps provided detailed clues of the fire's advance. These FPIs are documented in the Photo Log as 0274, 0275, 0276, 0278, 0280, 0283, 0287, 0288, 0289, 0292, 0295, 0296, 0332.



Photo 0286, aspect SE, FPIs of protection and cupping typical on low stumps in the GOA

13.) By following these vectors down-ridge, a smaller area of origin emerged as the advancing indicators narrowed to about 30 feet. Beyond this point, I could no longer narrow down the fire's path of advance due to the area being disturbed by suppression work. From the disturbance of the ground, it appeared that one or more firefighters had worked the area with hand tools to excavate and extinguish heat and then construct hand line using this origin area as an anchor point. At the bottom of the ridge, I was able to sketch a Specific Origin Area (SOA) of about 30 feet by 25 feet. In the center of this SOA was the slash pile with heat that I had observed in paragraph 8 above. Before beginning a search of the SOA for FPIs and evidence, I photographed the area in detail. As I mentioned before, because the area had been worked recently by firefighters, the few

FPIs that were visible (protection) were not reliable due to their having been moved from the original locations.

14.) I setup an evidence grid search of the SOA, and methodically covered each square foot visually, scanning for any evidence of a competent ignition source. During this grid search, the only evidence discovered was the holdover heat located between the surface and 12 inches below. I excavated most of the slash pile down to 24 inches, to ensure that holdover heat could not be found any deeper, but no other heat was located. Because of the location of the slash pile in the SOA, and the presence of substantial heat excavated several days after the start of the fire, this cause became the primary focus of my interviews. Supplemental Reports from (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) attached describe extensive checking and 'cold-trailing' of the slash piles in the weeks after the RX burn and up to April 20, when the slash piles were checked again for heat by fire crews. The Wild CAD log of the RX burns named 'Pino West' is attached to this report.

15.) After conversations with local firefighters, the possibility of locating a recreational campfire seemed very real. Just the day prior, a recreational campfire had caused a small fire in the same Ranger District. In this particular SOA, an escaped campfire could easily have spread uphill into adjacent fuels. After visually scanning each square foot, I carefully excavated the top few inches of ash, debris, and dirt to search for sub-surface evidence and heat. After scanning and excavating the SOA for evidence, I pulled a high-power magnet through the SOA in an attempt to secure any ferrous-based evidence. This is typically the last step taken during a SOA investigation. After searching the area carefully for about 2.5 hours, no evidence of a competent ignition source or clues to a specific cause could be located. If any unconsumed wood from a campfire had been in the area it had probably been destroyed by suppression work.

15.) Another possible fire cause in this location and during these fire indexes is smoking. Both the receptive fuel's relative humidity content (RH) and the ambient RH need to be very low for a cigarette butt to be a competent ignition source. Due to the extreme weather conditions, a cigarette in a receptive fuel bed at the bottom of this ridge is included in this investigation as a possible cause, although no evidence of smoking (cigarette butt, foil band, pipe, etc.) was discovered during the search of the SOA.

16.) The final cause I was not able to exclude from the evidence in the SOA was Incendiary. As with Smoking, the extreme fire weather conditions and fuel RH content were perfect for a 'hot set' start, if an Incendiary start was someone's intention. Because no other witnesses were in the area during or immediately after the start of this fire, a 'hot set' or other incendiary device cannot be excluded from this investigation.

17.) This area is labeled as the Specific Origin Area on the Fire Scene Sketches, and is documented in the Photo Log as 0211, 0212, 0213, 0215, 0233, and 0235.



Photo 0235, aspect SW, view of the SOA from the center of the path of fire's advance to the NE

14.) After documenting the Specific Origin Area (SOA) by photographing and then removing the pin flags, I returned the next day, May 1, to follow the path of advance to the NE. I wanted to thoroughly scan the area for any other evidence of a competent ignition source, and map the path of the fire up and down the neighboring ridges. Once I reached an area in between FS 10DDB and FS 10DD, I observed a second lightning-scared tree in the path of advance. By analyzing the FPIs surrounding the lightning tree of protection and angle of char, I was able to confirm the fire's path of advance both into the area from the west and then out to the east.



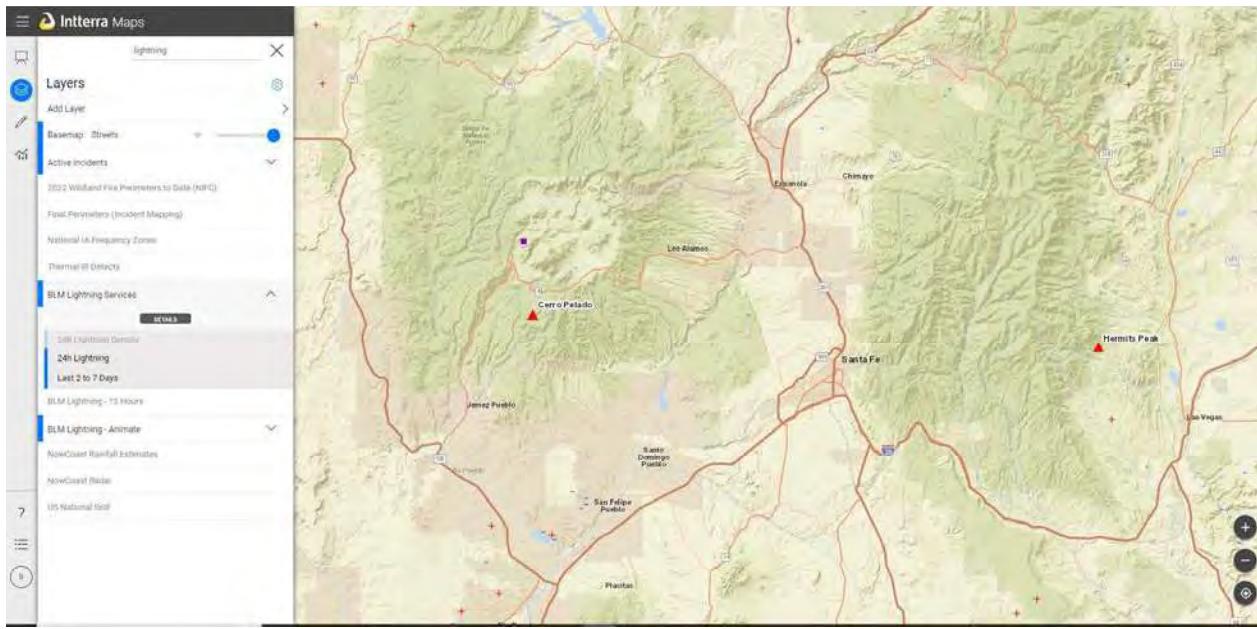
Photo 0167, aspect N, lightning tree at the north end of the heel. This tree was also excluded as a potential ignition source.

14.) Continuing to follow the path of advance, I came across FS 10DD and saw an electrical junction box on the west side of the road. It had sustained minimal damage from the fire, and I walked around the junction box to see if any FPIs showed the spread of fire from the box. Because this junction box had only sparse flashy ground fuels around it, there was no observable path of advance out of the box. This box was labeled on the side as "JBox4" and is documented in the photo log as photos 0253, 0254, and 0255. I marked the location by GPS and walked the path of advance for another 1/2 mile to confirm the fire's advance vector out of the heel was east. I returned to my truck and drove the length of FS 10DD to see if any other junction boxes had signs of mechanical or electrical failure that could become a source of ignition into adjacent fuels. In all, I was able to safely examine three junction boxes, one concrete junction vault, and at least 2 miles of overhead transmission lines with conductors and poles that were destroyed in by the advancing fire. After sketching and photographing the FPIs in this area I concluded that the fire's advance had been at its most intense when it reached the power-lines and underground feeder line. None of the FPIs confirmed that any ignition had occurred at or near the junction boxes or overhead transmission lines. These are documented in the photo log as 0253, 0254, 0257, 0258, 0261, and 0263.



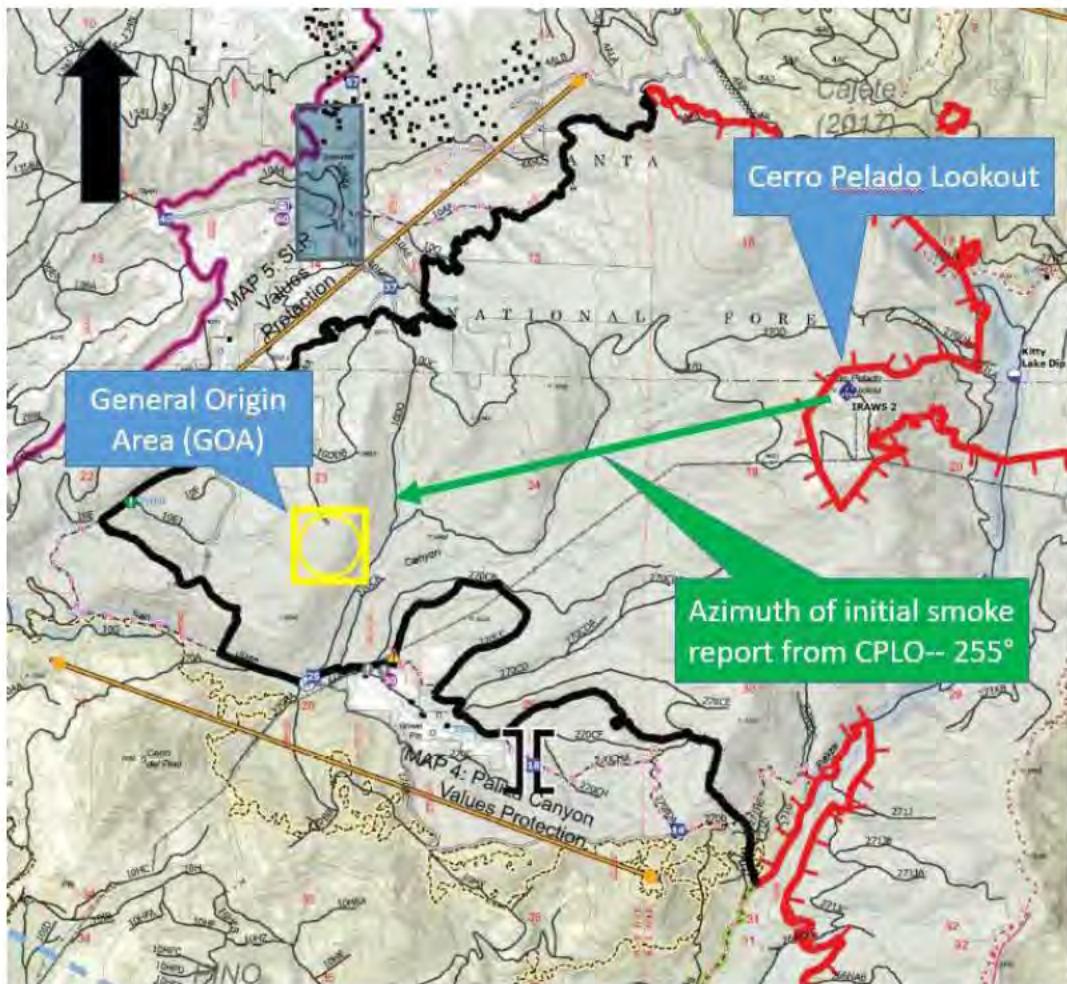
Photo 0253, aspect SW, junction box on FS road 10DD. Over the top of the box is the fire's path of advance.

15.) After confirming my hypothesis about the fire's advance vector of N/NE out of the heel, I contacted dispatch to confirm that no lightning cloud-to-ground strikes had been recorded recently. Dispatch emailed me the lightning log, and it showed clear of lightning strikes for the seven day period prior to April 22. Other open-source lightning maps also confirmed this.



16.) On May 2 I began contacting the Initial Attack IC's and Engine Captains for supplemental statements about the fire's early behavior, location, and path of advance. I spoke with six agency personnel about their observations during the Initial Attack Period, and their reports are attached as Supplemental Reports 1 – 6. All of their reports confirmed the identified GOA as the early source of smoke and active flame. None of the interviews and following reports described any other people or vehicles in the area during the Initial Attack period.

17.) On May 2 I spoke with (b) (6), (b) (7)(C), the Cerro Pelado Lookout by phone. He confirmed the azimuth of first smoke reported at 255 degrees from the Cerro Pelado Fire Lookout, and described the efforts of FMO (b) (6), (b) (7)(C) to immediately respond to the Lookout and remove Scott to a safe location. This azimuth confirms the GOA identified during this investigation.



Map of first smoke report from Cerro Pelado Fire Lookout compared to GOA identified during this investigation.

17.) End of Report. I reserve the right to change my conclusions based on additional evidence presented.

EVIDENCE / PROPERTY

1. No physical evidence was collected and preserved during this investigation.
2. All photos, notes, and sketches will remain with the Investigator in their original format for five years from the date of this report.

CONCLUSION / FINDINGS

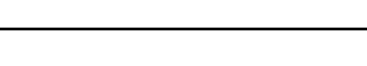
1. **Origin: Conclusive:** A thorough analysis of the fire pattern indicators led to a Specific Origin Area at N 35° 46.420' - W -106° 35.922'.
2. **Cause: Inconclusive:** Possible causes include Campfire, Smoking, Debris Burning, and Incendiary. After excluding all other possible ignition sources and reviewing the available evidence, the cause of the Cerro Pelado wildfire was not able to be determined due to the destruction of the origin area through suppression efforts. This investigation recommends a review of policy, procedure, and practices associated with RX burning, slash pile location, and subsequent slash pile inspections.
3. Excluded Causes: Lightning, Railroad, Equipment Use, Children, Miscellaneous
4. No persons, vehicles, or reports of suspicious behavior were passed on to US Forest Service Law Enforcement Officers for follow up.

Attachments (check all that apply)

<input type="checkbox"/> Burn Ban Order	<input checked="" type="checkbox"/> Weather Observations RAWS	<input checked="" type="checkbox"/> Regional Fire Scene Map	<input checked="" type="checkbox"/> Photograph Log(s) 3
<input type="checkbox"/> Burn Permit	<input type="checkbox"/> Fire Weather Watch	<input checked="" type="checkbox"/> Fire Origin Location Map	<input type="checkbox"/> Statement(s)
<input type="checkbox"/> Citation(s)	<input checked="" type="checkbox"/> Red Flag Warning	<input checked="" type="checkbox"/> Fire Scene Sketch	<input type="checkbox"/> Field Notes
<input type="checkbox"/> Incident Narrative	<input checked="" type="checkbox"/> WildCAD Incident Card (2)	<input checked="" type="checkbox"/> Lightning Detection Map(s)	<input type="checkbox"/> Contacts (list)
<input type="checkbox"/> Other: Property/Evidence Control and Chain of Custody (Transfer) Form			
<input type="checkbox"/> Other: IFPL (Tool Inspection)			
<input checked="" type="checkbox"/> Other: Supplemental Report from (b) (6), (b) (7)(C)			
<input checked="" type="checkbox"/> Other: Supplemental Report from (b) (6), (b) (7)(C)			
<input checked="" type="checkbox"/> Other: Supplemental Report from (b) (6), (b) (7)(C)			
<input checked="" type="checkbox"/> Other: Supplemental Report from (b) (6), (b) (7)(C)			
<input checked="" type="checkbox"/> Other: Supplemental Report from (b) (6), (b) (7)(C)			
<input checked="" type="checkbox"/> Other: Supplemental Report from (b) (6), (b) (7)(C)			

Signatures

I, the undersigned investigator, certify under penalty of perjury under true and accurate to the best of my knowledge. (b) (6), (b) (7)(C) on that the foregoing is

Investigator (print): (b) (6), (b) (7)(C), INVF, WaDNR	Signature: 	Date: May 9, 2022
Reviewed By (print): (b) (6), (b) (7)(C), LEO, USFS	Signature: 	Date: / /2022
Approved By (print):	Signature: 	Date: / /2022



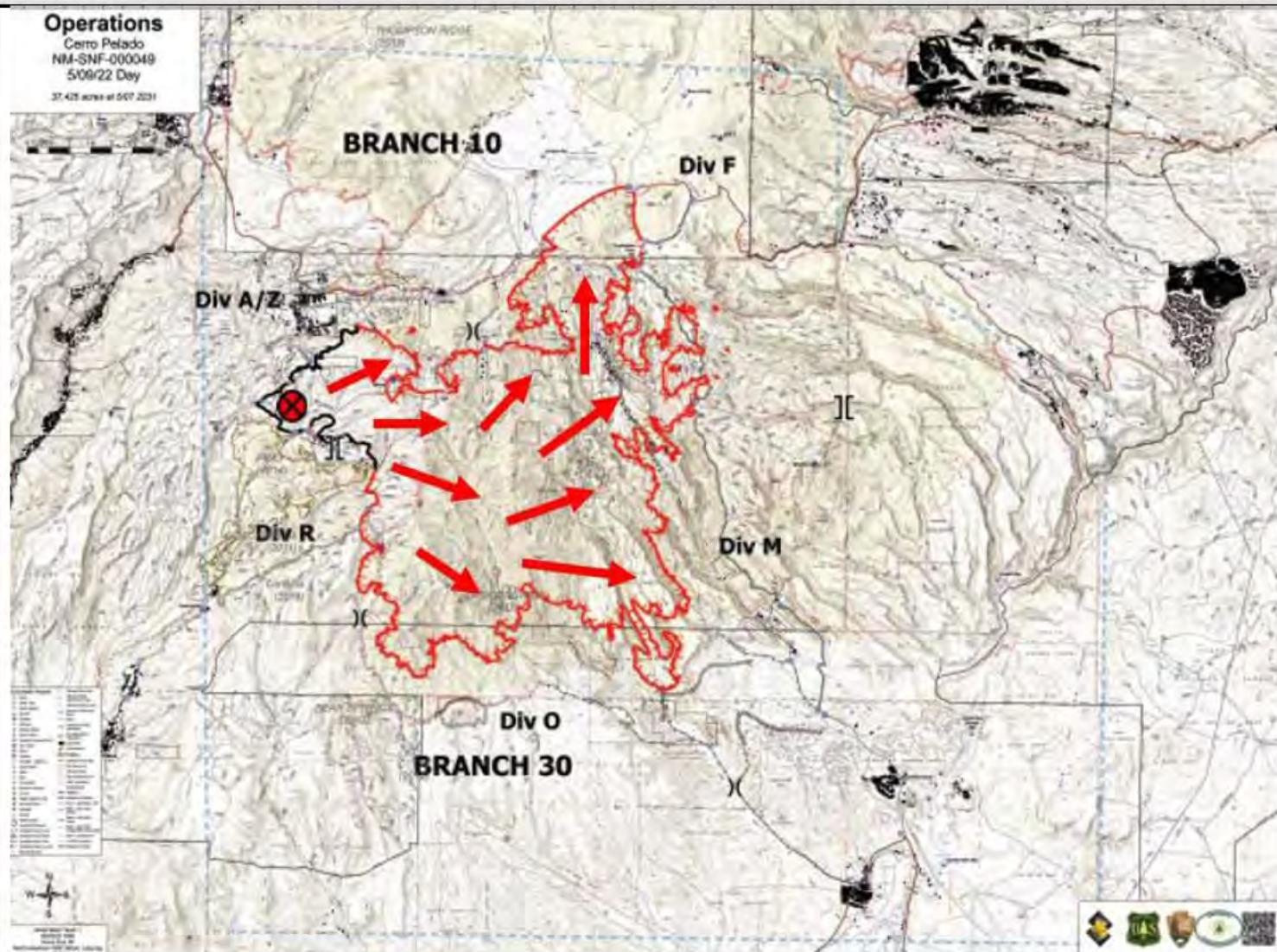
STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION

ORIGIN AREA PROGRESSION SKETCH/DIAGRAM

Case File No.
NM-SNF-000049
Other Related No.
221-IDA

(Not To Scale)



Incident Name:	CERRO PELADO	Incident Date:	APRIL 22, 2022
----------------	--------------	----------------	----------------

Drawn By:	(b) (6), (b) (7)(C), INVF, WaDNR	Sketch Date:	May 8, 2022
-----------	----------------------------------	--------------	-------------

LEGEND

→ Advancing Fire Indicator	Wind (Direction/Speed)	----- Trail	Power line
▲ Lateral Fire Indicator	(/)	*-*-* Fence	↑ Structure
● Backing Fire Indicator	~~~~ Creek	===== Secondary Road	◇◇ Aerial Retardant Drop
○ Fire Perimeter	● Reference Point(s)	===== Highway	XXXXX Completed Dozer Line
✖ Fire Origin	✖ Spot Fire	Railroad	— Completed Hand Line



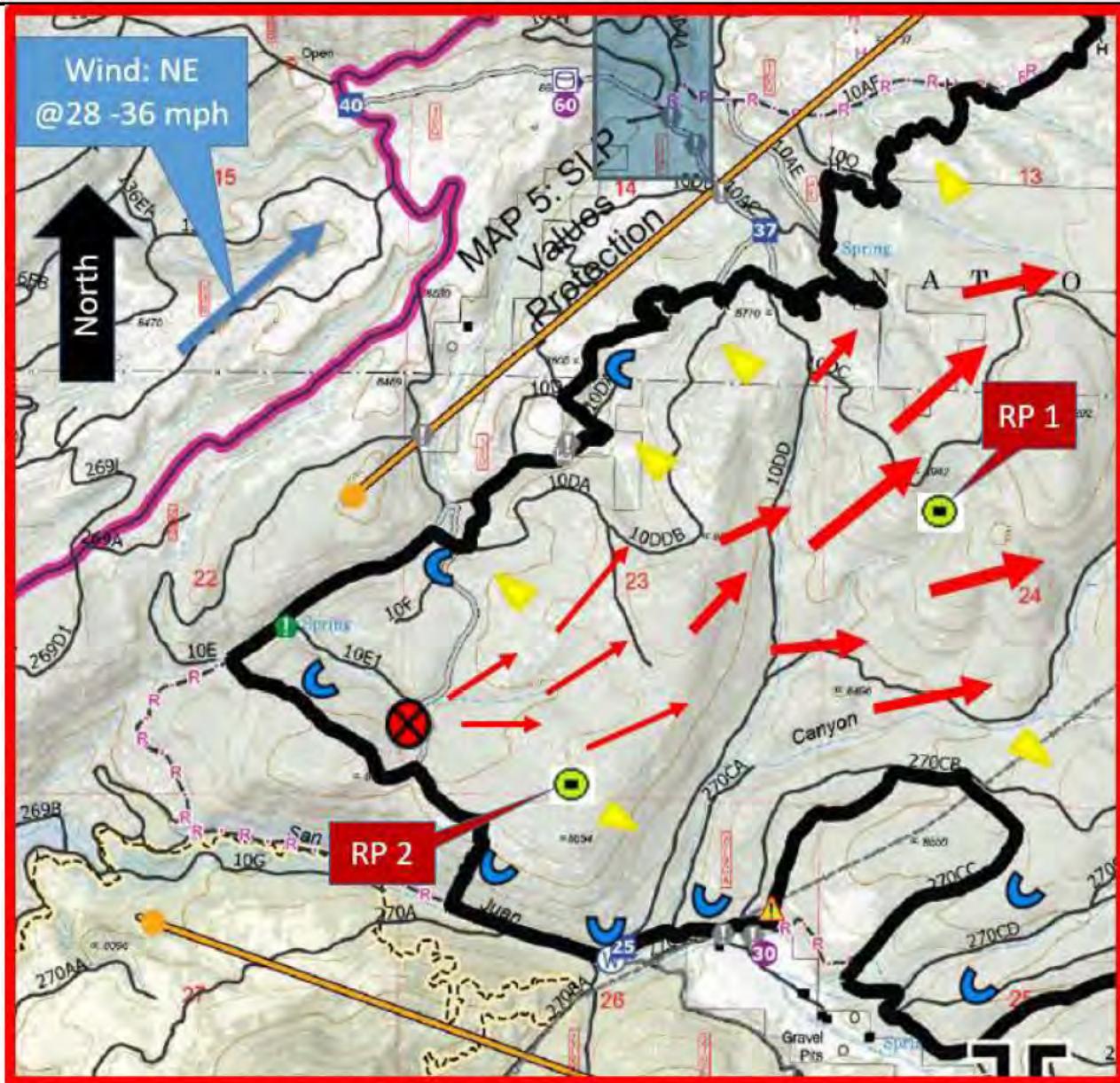
STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION

ORIGIN AREA PROGRESSION SKETCH/DIAGRAM

Case File No.
NM-SNF- 000049
Other Related No
221--IDA

(Not To Scale)



Incident Name:

CERRO PELADO

Incident Date: 4 / 22 / 2022

Drawn By:

(b) (6), (b) (7)(C), INVF

Sketch Date: 4 / 27 / 2022

LEGEND

→	Advancing Fire Indicator	←	Wind (Direction/Speed)	-----	Trail		Power line
▲	Lateral Fire Indicator	(/)		*-*-*-*	Fence	↑	Structure
⌚	Backing Fire Indicator	~~~~	Creek	=====	Secondary Road	◇◇	Aerial Retardant Drop
☁	Fire Perimeter	●	Reference Point(s)	=====	Highway	XXXXX	Completed Dozer Line
✖	Fire Origin	🔍	Spot Fire		Railroad	—	Completed Hand Line



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
PHOTO LOG

Case File No. NM-SNF- 000049
Other Related No. 221-IDA

Incident Name: CERRO PELADO	Region: SANTA FE NF	District: JEMEZ RANGER DISTRICT	Incident Date: APR 22, 2022
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All Photos Taken or Received By: (b) (6), (b) (7)(C)	INVF, WaDNR
--	-------------

Camera Used: Brand/Model: Iphone XR

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



0273

Compare and Contrast photo: ponderosa pine

0122

Compare and Contrast photo: ponderosa pines with angle of char, fire vector from left to right



0387

Compare and Contrast photo: ponderosa pine stump

0278

Compare and Contrast photo: ponderosa pine stump, with macro-cupping and protection, fire vector from lower right to upper left



0386

Compare and Contrast photo: ponderosa pines

0195

Compare and Contrast photo: ponderosa pines with high-canopy angle of char, fire vector left to right



0392

Compare and Contrast photo: ponderosa pines needles

0196

Compare and Contrast photo: ponderosa pines needles with freezing, fire vector from left to right



0383
Compare and Contrast photo: ponderosa pine stump



0190
Compare and Contrast photo: ponderosa pine stump with cupping and protection, fire vector bottom to top



0384
Compare and Contrast photo: granite rock



0274
Compare and Contrast photo: granite rock with soot and staining, fire vector from right to left



0389

Compare and Contrast photo: bunch grasses

0197

Compare and Contrast photo: bunch grasses with protection, fire vector from left to right



0161

Aspect E, General Origin Area (GOA)

0211

Aspect SW, Specific Origin Area (SOA) from the path of advancing fire pattern indicators (FPIs)



0212

Aspect NW, SOA destroyed from fire suppression work,
hand tool and water damage to scene

0213

Aspect SW, SOA destroyed from fire suppression work,
hand tool and water damage to scene



0145

Aspect E, active backfire in the heel on April 28, six
Days after Cerro Pelado fire began

0233

Aspect NE, path of advancing FPIs from SOA



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
PHOTO LOG

Case File No.
NM-SNF- 000049
Other Related No
221--IDA

Incident Name: CERRO PELADO	Region: SANTA FE N.F.	District: JEMEZ RANGER DISTRICT	Incident Date: APR 22, 2022		
All Photos Taken or Received By:	(b) (6), (b) (7)(C), INVF, WaDNR				
Photo Log Start Date & Time:	April 22 at 15:00	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Photo Log End Date & Time:	May 12 at 12:30	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM

**0287**

Aspect N, protection and cupping on stump in GOA

0288

Aspect N, protection and cupping on stump in GOA

**0289**

Aspect SW, protection on back of stump in GOA

0292

Aspect SW, sooting, staining, and protection on granite boulder in GOA



0295

Aspect NE, protection and cupping on stump in GOA

0296

Aspect SE, protection and cupping on stump in GOA



0332

Aspect SW, angle of char on ponderosa in GOA

0211

Aspect S, view of SOA from center of
the advancing indicators



0212

Aspect NW, view of SOA and destruction of scene
due to suppression efforts

0213

Aspect SW, view of SOA and destruction of scene
due to suppression efforts



0215

Aspect SE, view of SOA and destruction of scene
due to suppression efforts

0233

Aspect NE, from SOA, fire's path of advance
upslope and downwind

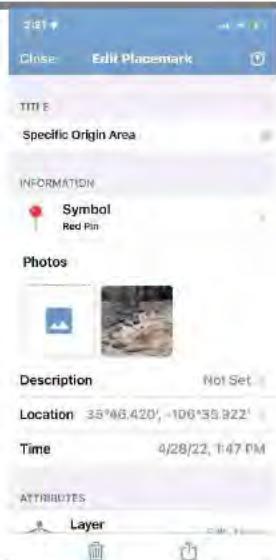


0235

Aspect SW, view of SOA through the center of advancing FPIs

0161

Aspect , view of SOA and areas of unburned fuel to the SW with backing down the ridge



1111

Avenza screenshot of SOA location

0167

Aspect W, second lightning tree in the path of advance



0253

Aspect SW, junction box labeled "JBOX 4"
on FS road 10DD

0254

Aspect SE, back of "JBOX 4" on FS road 10DD



0257

Aspect S, "JBOX 3" on FS road 10DD

0258

Aspect SE, "JBOX 3" on FS road 10DD



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
WILDLAND FIRE INVESTIGATION REPORT
PHOTO LOG

Case File No.
NM-SNF- 000049
Other Related No
221--IDA

Incident Name: CERRO PELADO	Region: SANTA FE N.F.	District: JEMEZ RANGER DISTRICT	Incident Date: APR 22, 2022	
All Photos Taken or Received By:	(b) (6), (b) (7)(C), INVF, WaDNR			
Photo Log Start Date & Time:	April 22 at 15:00	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	Photo Log End Date & Time: May 12 at 12:30	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM



0261
Aspect NW, "JBOX 2" on FS road 10DD



0263
Aspect S, "JBOX 2" on FS road 10DD

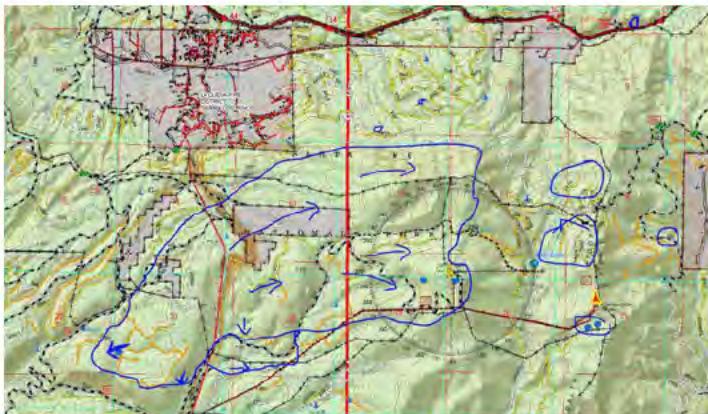


JA1
Attachment to Supplemental Report from (b) (6), (b) (7)(C)
, Engine Captain BLM 2601



JA2
Reference Photo to Supplemental Report from (b) (6), (b) (7)(C)
, Engine Captain BLM 2601

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



LM 1

Attachment from Supplemental Report by (b) (6), (b) (7)(C), DAFMO, fire progression sketch during Initial Attack period



SW 2

Attachment from Supplemental Report by (b) (6), (b) (7)(C), Cerro Pelado Fire Lookout, taken during Initial Attack period



SW 3

Attachment from Supplemental Report by (b) (6), (b) (7)(C), Cerro Pelado Fire Lookout, taken during Initial Attack period

EXHIBIT 1

From Federal Bureau of Investigation
Report

Always record: 1 Date 4/11/04, Time 1930
For your reference: 2 Name Craig Roberts

3. Address 265 W 2nd St
4. Legal Description 7 1/2 MI S 25 E
5. Date of Survey Started 100
6. Location by Coordinates FR 10 D, sec 11

A property had been off the market giving initial info to reporter.
Dimensions:

7. Areas Discrepancy

a. Volume Color Odor
Soil White Fine
Medium Gray Wet
Large Blue Sandy
Rock Dark
Tallies Medium
Copper Other

d. Changes from initial survey is none

Always Report: 8. Any MAJOR change in exterior appearance
14a. Increases or decreases in volume, change in color;
If it disappears

Always record: 9. Crops Existing None, Yield None
For your reference: 10. If lightning struck; record date and time of last
Lightning in the area (if known) None

11. Name of Person Drafting Report (b) (6), (b) (7)(C)

8

Attachment from Supplemental Report by (b) (6), (b) (7)(C),
Cerro Pelado Fire Lookout

ADDITIONAL PHOTOS MAY HAVE BEEN TAKEN OF THIS FIRE, AND IF SO, THEY ARE ON FILE WITH THE INVESTIGATOR. THE PHOTOS SHOWN HERE ARE THE MOST RELEVANT TO THE INVESTIGATION. THE PHOTOS SHOWN HAVE ONLY BEEN RESIZED OR ROTATED. ALL ORIGINAL PHOTOS HAVE BEEN STORED IN THEIR ORIGINAL, UNALTERED FORMAT.



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name

Program

Report By: (b) (6), (b) (7)(C)

Lead Investigator: (b) (6), (b) (7)(C), WaDNR

Incident Date: 4-22-2022

Other Officer(s):

Ref. Case No.

DETAILS:

As a preface to this I feel it is important to mention that the fire was reported 2.5 hours prior to me arriving on scene and assuming command. Out of area engine BLM2601 and the Bandolier NP engine 692, we on scene first, With E431 and DIV 10-3 shortly after, and first on scene from our local unit.

Fuel conditions are Brown Grass, 10 hr fuels in the 5-8%, and 1000 hr fuels between 8-10 %

At roughly 1815 when I arrived on scene the fire was wind driven, by sustained 30-35 mile an hour winds with gusts to around 70. The column was black and dark gray, with heavy volume leaning over in the wind out to the East. The eastern flank of the fire was sustaining in the crowns heading up Cerro Pelado proper as well as skirting just south of the South East corner of the private inholding of Sierra Los Pinos and North of Los Griegos proper. The North slopes of the highest terrain appeared to retard fire behavior from extreme to active, but the availability of the adjacent Southern exposures combined with the high winds, allowed the fire to easily spot across the expanses, then consume up the south aspects and spot again across the north slopes. There were confirmed spots near the communications towers in section 21, as well as the furthest Eastern spot in the South East ¼ of Section 16 near the private inholdings off forest road 282. There was also a spot fire across NM Hwy 4 near the Las Conchas Trailhead on the south end of Section 4 that was contained.

After the spot was contained I travelled South around the western edge of the fire along FR10 and then East Along FR 270. Along 270 the fire was backing and flanking on the North side of the road and more Head and Flanking fire where it had crossed 270 in the switchback section to the East. Fire behavior remained extreme and very active well into the early morning hours until reducing to active around the perimeter in the predawn hours, all except the area around FR270 and subsidiaries where active fuels treatments were taking place and the heavy fuel loading created a micro climate where the heat generated made the entire surrounding area remain very active throughout the night.

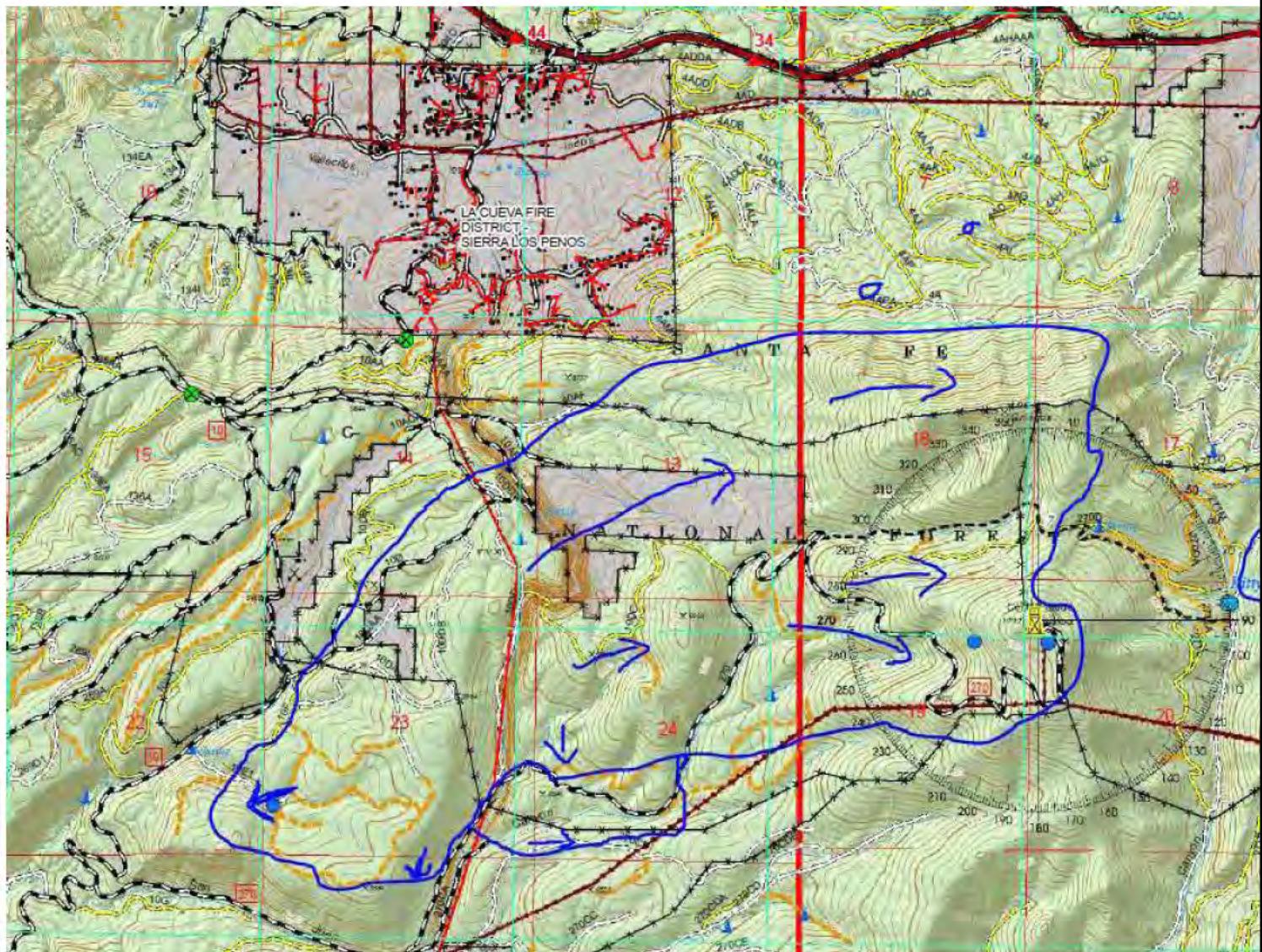
I did have a chance to get on FR 10F in the Western side of section 23 in the predawn hours and that fire was backing to the west through a previous treatment area with multiple log decks and some piles consuming.

Due to the snow we were unable to check it until the next week when it was checked on two different days. The unit had great consumption and many piles we not showing any smoke. We burned one pile that some equipment was parked next to on the southern part of the Pino West(West of FR 10) on 2-19-22, and the area in question was again checked that day and snow had covered some of the ash pits with a handful of pile areas still showing obvious heat.

Due to my obligations with trainings, hiring etc. I cannot give you specifics on what days the piles were checked in March, but it was multiple times.

I can verify that the unit was checked April 20th, due to the activity in the region and after multiple Red Flag days and no heat was found. This was just two days prior to the start of the Cerro Pelado Incident.

The smoke registration for New Mexico Air Quality number is 22FIIF0015





(b) (6), (b) (7)(C)

DAFMO
FSC Chairperson

Forest Service**Santa Fe National Forest, Jemez Ranger District**

p: 575 829-3535 x (b) (6), (b) (7)(T)

c: (b) (6), (b) (7)(C)

f: 575-829-3223

(b) (6), (b) (7)(C) @usda.gov

PO Box 150
 051 Woodsy Lane
 Jemez Springs, NM 87025
www.fs.fed.us

**Caring for the land and serving people****ATTACHMENTS**

Image in Photo log as (b) (6), (b) 1, fire progression sketch during Initial Attack period

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

(submitted via email to (b) (6), (b) (7)(C) on 5/3/2022)

*Signature**Date*

Name: (b) (6), (b) (7)(C) _____

DAFMO, Forest Service
 Santa Fe National Forest, Jemez Ranger

Title: District

Phone: (b) (6), (b) (7)(C) cell



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name

Program

Jemez

Report By: (b) (6), (b) (7)(C), Captain 431

Lead Investigator: (b) (6), (b) (7)(C)

Incident Date: 4-22-2022

Other Officer(s):

Ref. Case No.

DETAILS

4/19

(3 days before Cerro Pelado fire) As the shift was finishing up our lookout called in a smoke report. It was the San Juan fire, it was located near FS 269 off FS 10. While en route as we turned off the 10 on to the 269 a gray Silverado was parked in the intersection and did not move for the train of 4 fire Vehicles responding to the fire. I did not think much of it at the time as that is a place where cell phones work and his phone was in hand. Upon arrival to the San Juan fire it was in the black of an old pile burn. The way it had burned / was burning was unique, and made me question it in my head. On the west side of the fire there was a sole heavy log burning on a large mound of dirt and on the east side 1 hour fuels were consuming, there was unburned fuel and cold black between them. So spread to both sides of the fire seemed difficult to understand. As my module worked the fire My FMO drove around the area and looked at as many piles as he could before it got too dark.

4/20

(2 days before the Cerro Pelado Fire) My modules assignment for the day was to go back to the San Juan fire and work it to a contained/ closer to controlled status, we were also asked to check the other piles in the area to see if we found another incident similar to this fire. So we took the UTV up to the area to help move around more quickly. On this day I had 6 personnel. I cannot give a number to the amount of piles that we checked that day but it was a lot. I also remember an intersection that was in a picture shown to me by (b) (6), (b) (7)(C) as an area we had been in. We concluded our day finding no issues with any of the other burnt piles.

4/22

The days leading up to the Cerro Pelado fire had forecasted a major wind event for 4/22. It was an accurate forecast. As I drove my type 4 engine I could feel the wind pushing it if it became a cross wind. I would estimate that sustained 40 MPH winds started around 1300/1400. This day we were hanging signs as the forest went into restrictions, as the call came in for this fire we were up on the north part of the district and could hear how quickly this fire was growing by the lookouts updates. I first got eyes on the smoke as I drove east and was near Redondo Meadows. At this point there was still resources making their way to the origin. We continued do HWY 4 to FS 10 and people that got there ahead of us assumed the IC role as well as many local folks were trying to figure out where the fire was headed that first operational period. We got to the top of Caldwell Hill and the decision was made to start evacuations so we got turned around and went to the community of Sierra Los Pinos and helped with evacuations. After completing evacuations I was sitting in a meadow around what we deemed the farthest east structure incase it came down towards the house. This was when I started to be able to watch the fire behavior which I would guess to be at least 100 foot flame lengths as it ran up Los Griegos. Much of the activity was obscured by a ridge, but judging by what the smoke was doing it looked like the fire had multiple pulses of activity. I was on the fire this night until 2300 then released to have the engine available the next day. Most of the first shift was spent as a lookout or scouting roads. I would estimate the winds in the open 40-50 MPH fairly sustained. Ridgetops may have been even higher, I was not on a ridgeline on this night though.

(b) (6), (b) (7)(C)

Captain 431
Forest Service
Santa Fe National Forest, Jemez Ranger District
p: (b) (6), (b) (7)(C)
c: (b) (6), (b) (7)(C)
(b) (6), (b) (7)(C) @usda.gov

11 Forest Lane
Santa Fe, NM 87508
www.fs.fed.us

ATTACHMENTS

none

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

(submitted via email on 5/9/2022)

Signature

Date

Name: (b) (6), (b) (7)(C)

Title: Engine Captain – USFS Engine 431

Phone: (b) (6), (b) (7)(C) cell



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name

Program

Report By: (b) (6), (b) (7)(C)

Lead Investigator: (b) (6), (b) (7)(C), WDNR

Incident Date: 4-22-2022

Other Officer(s):

Ref. Case No.

DETAILS

External Email

Hello (b) (6), (b)

As we discussed on the phone Monday, I have attached a photo of the smoke report that I wrote for the Cerro Pelado Fire. Also I attached photos from the lookout that were taken at 1554 and 1640 on the day of the Fire.

When I first spotted the smoke it was white with blue and was by my estimate 1/2 to 2 acres. Wind gust that afternoon were up to 40 MPH with sustained winds of at least 20 MPH. There was a secondary smoke report in the Seven Springs area that was not visible from the lookout. This filled the radio with extra traffic. Within 30 minutes of spotting the smoke the Fire grew rapidly and smoke changed in both volume, color, direction though it was predominantly blowing Northeast.

By about 1700 (I don't remember the exact time because of the circumstances) I was evacuated by my FMO (b) (6), (b) (7)(C) and joined Utility 631 for the remainder of the day.

Thanks and let me know if there's anything else you need from me!

(b) (6), (b) (7)(C)

Cerro Pelado Fire Lookout

Cell Phone # (b) (6), (b) (7)(C)

Home address: (b) (6), (b) (7)(C)

(b) (6), (b) (7)(C) Email address (b) (6), (b) (7)(C)

Cerro Pelado
LOOKOUT INCIDENT REPORT

(check)

Always record: 1. Date 4/26/2022 Time 1530

2. Address 255 = 2 min

3. Legal description T. 10N, R. 3E, sec. 23, E.
5310

4. Below is Smoke Signd? YES No ✓

5. Location by Landmarks FR 10 D, mile 2.75
30° 49' 49"
106° 56' 09"

Always read
Habitat #2 box.

6. When giving
initial fire
report to
Dispatcher:

a. Smoke Description

b. Volume c. Color d. Distance

Small White Tan
Medium Grey Hazy
Large Blue Silvery
Black Dark
Yellow Orange
Green Other

e. Direction from which smoke is drifting NNE

Always Report: f. Any MAJOR change in smoke appearance _____
(Ex. Increase or decrease in volume, change in color,
(If) disappearance _____)

Always record: g. Cross Bearing: Latitude 40° 49' Longitude 106° 56'

h. If lightning caused, record date and time of last
lightning in the area (if known) 4/26/22

i. Name of Person Staffing Lookout: (b) (6), (b) (7)(C)

ATTACHMENTS:Images in Photo log labeled: (b) (6), (b) (7)(C) 1, (b) (6), (b) (7)(C) 2, (b) (6), (b) (7)(C) 3**Submitted By:**

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

(submitted via email to (b) (6), (b) (7)(C) on 5/4/2022)

Signature

Date

Name: (b) (6), (b) (7)(C)

Title: Cerro Pelado Fire Lookout

Phone: (b) (6), (b) (7)(C) cell



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT**Fire Name****Case File No.****Region****Program**

Report By: (b) (6), (b) (7)(C)	Lead Investigator: (b) (6), (b) (7)(C), WDNR	Incident Date: 4-22-2022
Other Officer(s):		Ref. Case No.

DETAILS

I have enclosed a few pictures at your request and my general summary of damage to our overhead power lines and poles. We have about 2.92 miles of overhead power lines and poles within the burn area. We have found 23 damaged structures and there may be as much as, or more overhead power line conductors damaged, in excess of 23,200 feet. As you know this fire is very active. This amount could easily increase. The last picture in the group I have sent is a junction box which includes our underground electrical feeder into Sierra Los Pinos. We do not know the extent of the damage to the wire and junction boxes. It looks bad. The underground feeder is approximately 1.59 miles in length.

(b) (6), (b) (7)(C)

jemezcoop.org

(b) (6), (b) (7)(C)

Jemez Mountain Electric Cooperative, Inc.
 17421 Hwy 4
 Jemez Springs NM 87025

ATTACHMENTS

Photos of damage to electrical transmission and distribution infrastructure

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

(submitted via email to (b) (6), (b) (7)(C) on 5/9/2022)

Signature

Date

Name: (b) (6), (b) (7)(C)

Title: Jemez Mountain Electric Cooperative, Inc.

Phone: (b) (6), (b) (7)(C) cell

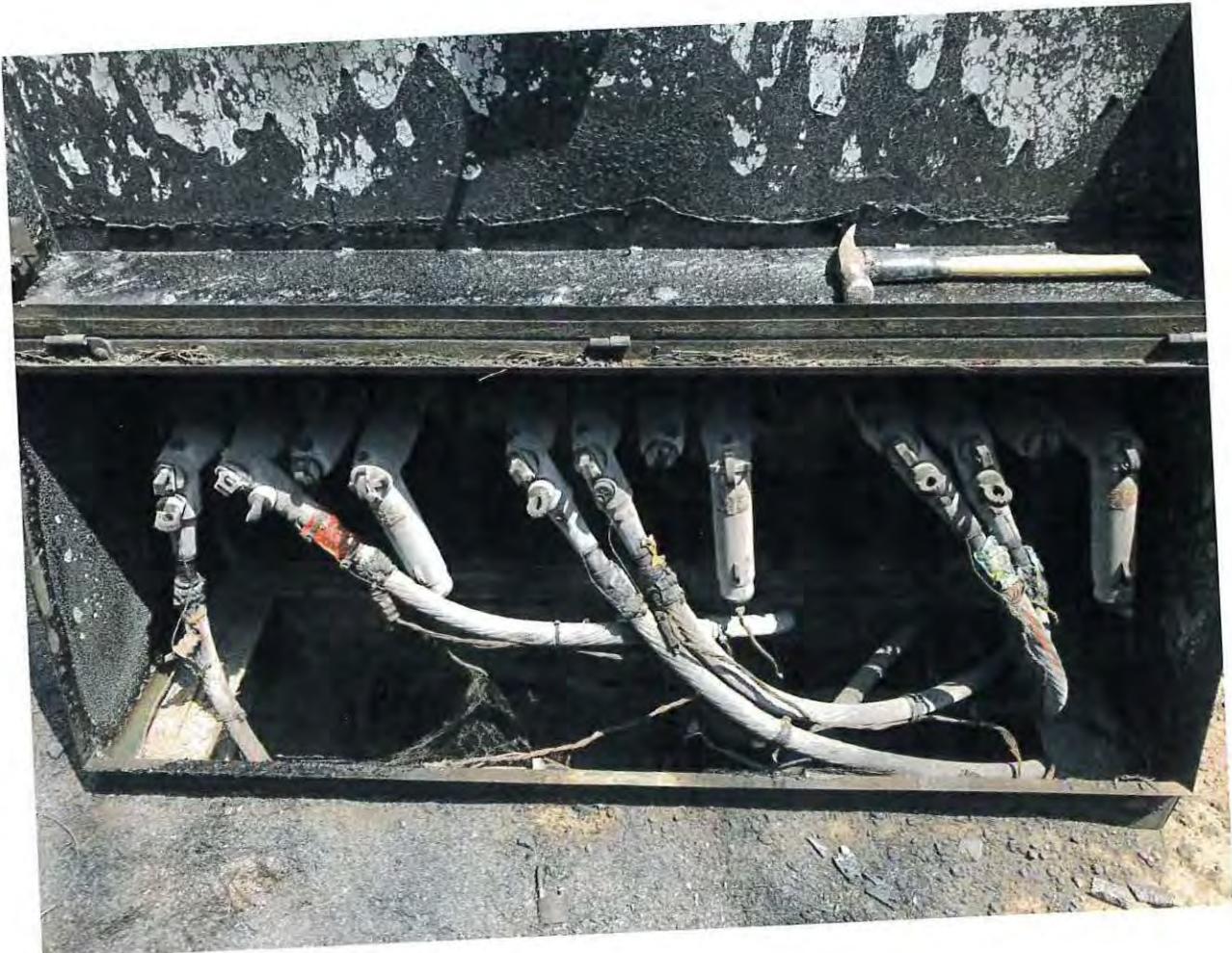






00054







STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name

Case File No.

Region

Program

Report By: (b) (6), (b) (7)(C)	Lead Investigator: (b) (6), (b) (7)(C), WDNR	Incident Date: 4-22-2022
Other Officer(s):	Ref. Case No.	

DETAILS

1. I was the initial IC of the Cerro Pelado Fire. My initial response was to not worry about where the fire started, but to protect life and property. We had responded from the northside of the fire off of HWY 4 and Forest Rd 10. The initial size up I gave was burning in Timber an estimated 10-15 acres with a high rate of spread. Once we got on scene at the heel of the fire, I gave my full size up to dispatch and estimated 100 acres burning in timber and logging slash with extreme potential. As we were driving up Forest Road 270 and did witness a white small pick up with a trailer parked in a meadow off of FR 270. After some initial resources arrived, I tasked them with trying to locate that vehicle and if possible, get me a better vehicle description and license plate. At that time, they were unable to locate any vehicle and the remaining resources were tasked with Evacuations as well as closing down HWY 4.

Please feel free to reach out to me with any other questions regarding the investigation.

My personal info is below

Respectfully,

(b) (6), (b) (7)(C)

(b) (6), (b) (7)(C)

Engine Captain - Bandelier N.M.

Engine 91

Pueblo Parks Fire Group

505 672 3861 ext (b) (6), (b) (7)

(b) (6), (b) (7)(C) cell

(b) (6), (b) (7)(C) @nps.gov

ATTACHMENTS

none

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

(submitted via email to (b) (6), (b) (7)(C) on 5/3/2022)

Signature

Date

Name: (b) (6), (b) (7)(C)

Title: Engine Captain - Bandelier N.M., Engine 91

Phone: (b) (6), (b) (7)(C) cell



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT**Fire Name****Case File No.****Region****Program**

Report By: (b) (6), (b) (7)(C)	Lead Investigator: (b) (6), (b) (7)(C)	Incident Date: 4-22-2022
Other Officer(s):		Ref. Case No.

DETAILS

Hello (b) (6),

I was Engine 2601, the first one on scene from my recollection.

We were south on the FS10 Road experiencing high winds on just south of the FS270 road. Several trees were had recently been uprooted and we watched a branch fall on the road 100 yards in front of us while patrolling. We received a call from dispatch on the radio and they told us there was a smoke report on the FS270 road. We turned around and got to the smoke in approximately 15-20 minutes. I called dispatch upon arrival asking if anyone was on it (there was not). I got out of the truck after we found a good egress below the heel. While doing so, a local engine arrived (about 1 minute after we contacted dispatch and got out) and took command of the fire before handing it off to an ICT3. From there, we did a meeting at the local nearby fire department and staged up on State/County Road 4 waiting to get assigned to a division.

I will post the one photo I took and a photo of the approximate area we staged when we got there, which was the fork on FS270 below the heal (Blue pin). (The orange lines were from where we worked with Division).

Thank you and please feel free to email or call my cell phone if any further questions!

(b) (6), (b) (7)(C)

Engine Captain

Eastern Montana / Dakotas BLM

Jordan, MT

Office Phone: (b) (6), (b) (7)(C)

Cell Phone: (b) (6), (b) (7)(C)

ATTACHMENTS

Images in Photo log labeled: (b) (6), (b) (6) 1, (b) (6) 2

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

(submitted via email to (b) (6), (b) (7)(C) on 5/5/2022)

Signature

Date

Name: (b) (6), (b) (7)(C)

Title: Engine Captain – BLM

Phone: (b) (6), (b) (7)(C) cell



STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

WILDLAND FIRE INVESTIGATION SUPPLEMENTAL REPORT

Fire Name

Case File No.

Region

Program

Report By: (b) (6), (b) (7)(C)	Chief	Lead Investigator: (b) (6), (b) (7)(C)	Incident Date: 4-22-2022
--------------------------------	-------	--	--------------------------

Other Officer(s):

Ref. Case No.

DETAILS

1. Our fire department was dispatched to a structure fire in the Seven Springs community in the northern part of the fire district on the afternoon of 4/22, I had responded to that location and upon arriving encountered 3 USFS employees running towards their vehicle and as they ran by said they'd just been dispatched for a new fire start on the southern end of FR10. I quickly dealt with the situation in Seven Springs which turned out to be a small pile of brush burning and not a structure fire and then I also headed towards FR10 and redirected all of the La Cueva resources to the now confirmed smoke report on FR10. As I responded towards the FR10 area I pulled off NM126 at a lookout point called Hamburger Hill to look towards the southeast to observe the area. I observed a column of thick dark grey smoke moving fast from south to north. Knowing the location, terrain and potential life and property risk I called my county office of emergency management to evacuate the Sierra de Los Pinos and Ruby Holt tract neighborhoods. The next couple of hours we evacuated those areas and did a second sweep to verify all residents had left the area. At this point we began preparations to begin structure protection in the southern and eastern areas of Sierra de Los Pinos which we engaged in until around 2300 hours at which time all resources disengaged and reassembled the next morning at 0700 to come up with a plan with (b) (6), (b) (7)(C) as IC.

(b) (6), (b) (7)(C)

Chief

La Cueva District

Sandoval County Fire Rescue

(b) (6), (b) (7)(C) mobile

(b) (6), (b) (7)(C) Office

LaCuevaFire@windstream.netATTACHMENTS

none

Submitted By:

I, the undersigned investigator, certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and accurate to the best of my knowledge.

(submitted via email to (b) (6), (b) (7)(C) on 5/6/2022)

Signature

Date

Name: (b) (6), (b) (7)(C)

Chief, La Cueva District, Sandoval County Fire

Title: Rescue

Phone: (b) (6), (b) (7)(C) mobile

National Weather Service Weather Forecast Office

Albuquerque, NM



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CLIMATE REPORT
NATIONAL WEATHER SERVICE ALBUQUERQUE NM
233 AM MDT SAT APR 23 2022

.....
...THE ALBUQUERQUE NM CLIMATE SUMMARY FOR APRIL 22 2022...

CLIMATE NORMAL PERIOD 1991 TO 2020

CLIMATE RECORD PERIOD 1891 TO 2022

WEATHER ITEM	OBSERVED VALUE	TIME (LST)	RECORD VALUE	YEAR	NORMAL VALUE	DEPARTURE FROM NORMAL	LAST YEAR
--------------	----------------	------------	--------------	------	--------------	-----------------------	-----------

TEMPERATURE (F)

YESTERDAY

MAXIMUM	84	228 PM	89	1965	72	12	71
MINIMUM	51	1159 PM	25	1907	45	6	44
AVERAGE	68				58	10	58

PRECIPITATION (IN)

YESTERDAY

0.00	0.63	1942	0.01	-0.01
MONTH TO DATE	T		0.39	-0.39
SINCE MAR 1	0.55		0.85	-0.30
SINCE JAN 1	0.85		1.64	-0.79

SNOWFALL (IN)

YESTERDAY

0.0	0.5	1995	0.0	0.0
MONTH TO DATE	0.0		0.3	-0.3
SINCE MAR 1	3.7		1.0	2.7
SINCE JUL 1	9.4		7.9	1.5
SNOW DEPTH	0			

DEGREE DAYS

HEATING

YESTERDAY

0	7	-7	7	
MONTH TO DATE	131	205	-74	165
SINCE MAR 1	647	686	-39	693
SINCE JUL 1	3623	3876	-253	3843

COOLING

YESTERDAY

3	0	3	0	
MONTH TO DATE	6	0	6	1
SINCE MAR 1	6	0	6	1
SINCE JAN 1	6	0	6	1

WIND (MPH)

HIGHEST WIND SPEED

46	HIGHEST WIND DIRECTION	SW (230)
64	HIGHEST GUST DIRECTION	S (180)
20.8		

SKY COVER

POSSIBLE SUNSHINE MM
AVERAGE SKY COVER 0.3

WEATHER CONDITIONS

THE FOLLOWING WEATHER WAS RECORDED YESTERDAY.

HAZE

SANDSTORM

RELATIVE HUMIDITY (PERCENT)

HIGHEST	29	1100 PM
LOWEST	6	200 PM
AVERAGE	18	

THE ALBUQUERQUE NM CLIMATE NORMALS FOR TODAY

	NORMAL	RECORD	YEAR
MAXIMUM TEMPERATURE (F)	72	85	1943
			2002
MINIMUM TEMPERATURE (F)	45	24	1895

SUNRISE AND SUNSET

APRIL 23 2022.....	SUNRISE	624 AM MDT	SUNSET	746 PM MDT
APRIL 24 2022.....	SUNRISE	623 AM MDT	SUNSET	746 PM MDT

- INDICATES NEGATIVE NUMBERS.
R INDICATES RECORD WAS SET OR TIED.
MM INDICATES DATA IS MISSING.
T INDICATES TRACE AMOUNT.

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National Weather Service
Albuquerque, NM Weather Forecast Office
2341 Clark Carr Loop SE
Albuquerque, NM 87106-5633
(505) 243-0702
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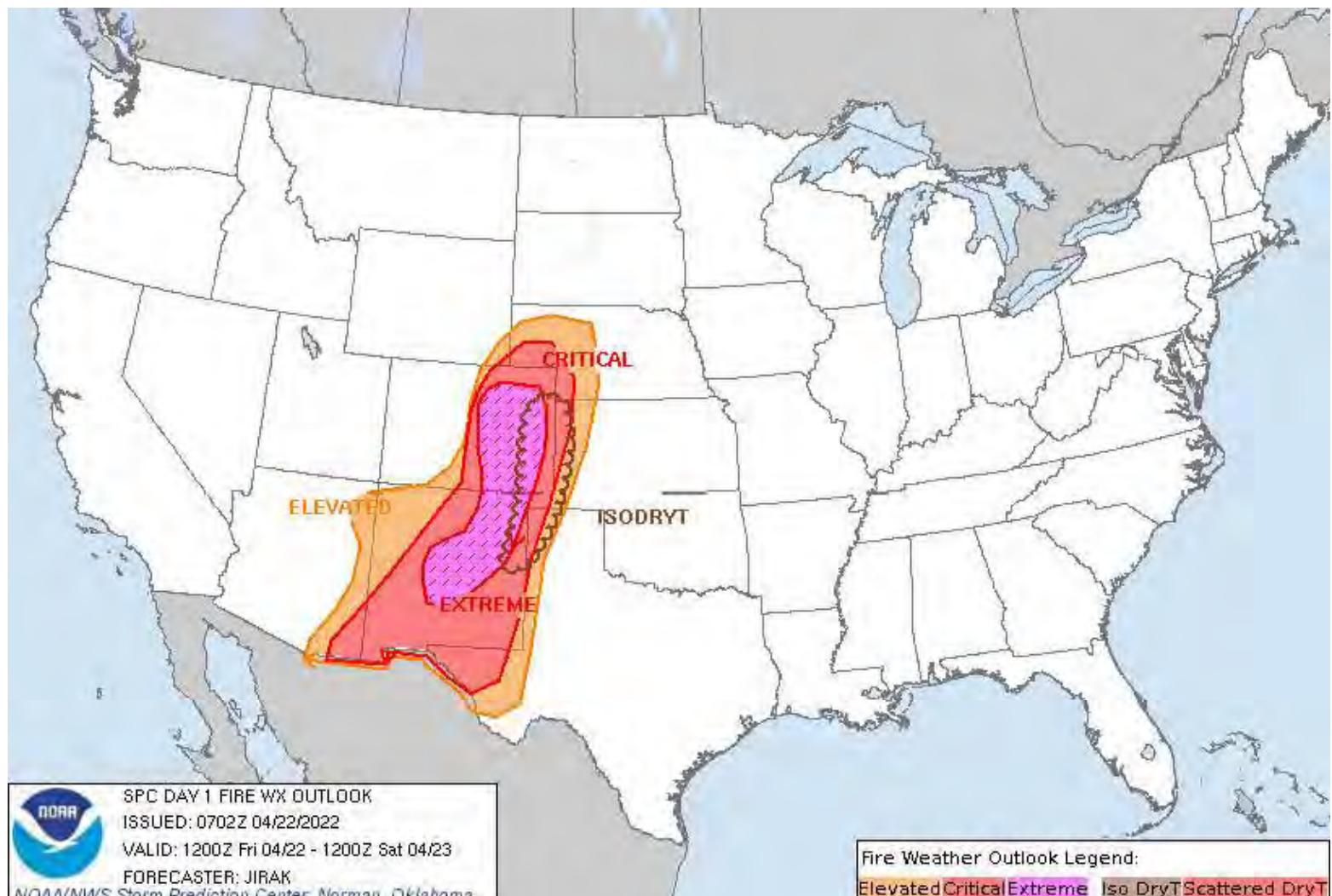
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Storm Prediction Center Day 1 Fire Weather Outlook

Created: Fri Apr 22 07:03:03 UTC 2022 (|



Risk	Area (sq. mi.)	Area Pop.	Some Larger Population Centers in Risk Area
Extreme	65,113	4,212,686	Denver, CO...Albuquerque, NM...Colorado Springs, CO...Aurora, CO...Lakewood, CO...
Critical	119,128	2,583,856	El Paso, TX...Boulder, CO...Greeley, CO...Longmont, CO...Las Cruces, NM...

Click for [Day 1 FireWX Areal Outline Product](#)

ZCZC SPCFWDDY1 ALL
FNUS21 KWNS 220702

Day 1 Fire Weather Outlook
NWS Storm Prediction Center Norman OK
0202 AM CDT Fri Apr 22 2022

Valid 221200Z - 231200Z

...EXTREMELY CRITICAL FIRE WEATHER AREA FOR PORTIONS OF CENTRAL AND EASTERN NEW MEXICO INTO EASTERN COLORADO...
...CRITICAL FIRE WEATHER AREA FOR PORTIONS OF THE SOUTHERN AND CENTRAL HIGH PLAINS...

...Synopsis...
DANGEROUS FIRE-WEATHER CONDITIONS EXPECTED TODAY ACROSS PORTIONS OF EAST-CENTRAL NEW MEXICO INTO EASTERN COLORADO

A highly amplified large-scale trough and accompanying intense deep-layer south-southwesterly flow will emerge over the southern Rockies and adjacent High Plains by peak heating. As a result, strong cyclogenesis will occur over far northeastern Colorado during

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the afternoon, with a sharpening dryline extending southward along the Kansas/Colorado border and the Texas/New Mexico border. The combination of a strong surface pressure gradient, hot/dry conditions behind the dryline, and strong south-southwesterly flow aloft will result in extremely critical fire-weather conditions from east-central New Mexico into eastern Colorado today.

...East-central New Mexico into eastern Colorado...

As temperatures climb into the upper 70s to middle 80s behind the sharpening dryline, deep boundary-layer mixing into very dry air aloft will result in widespread 5-15 percent minimum RH. At the same time, 30-40 mph sustained south-southwesterly surface winds (with widespread gusts of 50-60 mph) will overspread critically dry fuels (ERCs above the 90th+ percentile). The volatile combination of very strong/gusty winds, anomalously warm/dry conditions, and near-record dry fuels will encourage extreme fire-weather conditions.

...Remainder of the central and southern High Plains...

The eastern extent of critical fire-weather conditions will be demarcated by the placement of the dryline. Strong 30+ mph sustained southerly surface winds (with higher gusts) concurrent with afternoon RH values below 20% will extend into southern New Mexico, West Texas, the western Texas/Oklahoma Panhandles, western Kansas, and western Nebraska -- where fuels remain critically dry.

...Dry Thunderstorm Potential...

Another point of concern will be isolated dry thunderstorm development immediately along and ahead of the dryline this afternoon, which is expected to take place along the axis of the driest fuels. Any cloud-to-ground lightning flashes that can occur in proximity to the Colorado/Kansas and New Mexico/Texas border area will do so over very receptive fuels, and likely with little wetting rainfall at the early stages of thunderstorm evolution.

..Jirak.. 04/22/2022

...Please see www.spc.noaa.gov/fire for graphic product...

[Fire Weather/Forecast Products/Home](#)

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RAWS Weather Data for April 22, 2022: Jemez Weather StationRetrieved from: <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?nmXJEM>**Station Summary****Jemez New Mexico**

Daily Summary for

April 22, 2022

Hour of Day	Total Solar Rad.	Total Ave. ly.	Wind Dir.	Wind Max. Deg.	Air Temperature Mean Deg. F.	Fuel Temperature Mean Deg. F.	Fuel Moisture Mean Percent	Relative Humidity Mean Percent	Dew Point Deg. F.	Wet Bulb Deg. F.	Total Precip. inches
1 am	0.0	2.0	32	6.0	49.0	40.0	3.7	24	14	36	0.00
2 am	0.0	2.0	111	3.0	44.0	37.0	3.7	29	14	33	0.00
3 am	0.0	2.0	103	3.0	42.0	35.0	3.7	31	14	31	0.00
4 am	0.0	2.0	123	4.0	41.0	34.0	3.7	31	13	31	0.00
5 am	0.0	1.0	99	3.0	42.0	34.0	3.7	29	12	31	0.00
6 am	0.8	2.0	132	3.0	41.0	34.0	3.7	33	14	31	0.00
7 am	6.1	3.0	161	7.0	52.0	45.0	3.9	25	17	38	0.00
8 am	35.6	5.0	187	14.0	59.0	67.0	3.8	18	16	41	0.00
9 am	57.5	5.0	206	12.0	62.0	71.0	4.4	17	17	42	0.00
10 am	72.8	6.0	201	14.0	64.0	80.0	4.3	14	14	43	0.00
11 am	82.8	7.0	193	24.0	66.0	85.0	4.4	14	15	44	0.00
12 pm	87.2	7.0	196	19.0	69.0	89.0	4.2	12	14	45	0.00
1 pm	76.2	8.0	191	28.0	68.0	81.0	4.1	12	14	44	0.00
2 pm	70.9	11.0	208	26.0	70.0	85.0	3.7	8	6	44	0.00
3 pm	63.0	9.0	215	28.0	70.0	86.0	4.1	9	9	44	0.00
4 pm	49.2	10.0	208	26.0	68.0	80.0	3.9	9	7	43	0.00
5 pm	18.1	11.0	266	36.0	59.0	61.0	3.8	18	16	41	0.00
6 pm	10.1	7.0	279	32.0	50.0	52.0	3.7	30	20	37	0.00
7 pm	1.9	9.0	260	23.0	45.0	43.0	3.7	30	15	34	0.00
8 pm	0.0	12.0	315	34.0	39.0	39.0	3.6	39	16	30	0.00
9 pm	0.0	7.0	280	35.0	36.0	34.0	3.6	43	16	29	0.00
10 pm	0.0	5.0	273	21.0	35.0	31.0	3.6	48	17	28	0.00
11 pm	0.0	5.0	264	15.0	34.0	30.0	3.5	44	14	27	0.00
12 am	0.0	5.0	278	17.0	34.0	30.0	3.6	43	14	27	0.00

DAILY STATISTICS

Total Solar Rad.	Total Ave. ly.	Wind Dir.	Wind Max. Deg.	Air Temperature Mean Deg. F.	Fuel Temperature Mean Deg. F.	Fuel Moisture Mean Percent	Relative Humidity Mean Percent	Dew Point Deg. F.	Wet Bulb Deg. F.	Total Precip. inches
Total	632.0									0.00
Ave.	6.1	210		51.6	54.3	3.8	25	14	36	
Max.			36.0	70.0	89.0	4.4	48			
Min.				34.0	30.0	3.5	8			

Copyright: Western Regional Climate Center - Desert Research Institute - Reno, Nevada

NOTES:

- Daily averages might vary slightly from the average of the hourly values printed due to rounding of the hourly values.
- Data are subject to further review and editing. Please refer any questions to the Western Regional Climate Center.
- 1 ly = 1 cal/cm² = 4,1855 J/cm² = 3.6855 BTU/ft² = .01163 KW-hr/m²

WildCAD Incident Card - Santa Fe Interagency Dispatch Center: SNF 2022-49
"Cerro Pelado" Wildfire 04/22/2022 15:39:00 Order Number: NM-SNF-000049
Area 18 (JEMEZ)

Reporting Party: CPLO

Initial Report On Conditions:

smoke report near FR 270 255 degrees at 2 miles billowy blue/gray smoke strong winds moving east

Initial Location:

Lat: 35°,46',47.82", Lon: 106°,35',26.51", T18N, R3E, SWNE Sec 23

Actual Location:

Lat: 35°,46',30.01", Lon: 106°,35',3.83", T18N, R3E, SESE Sec 23

Dispatcher: (b) (6), (b) (7)(C) **Status:** Open

Fiscal Codes: P3PK47-0310

Web Comment:

Timer: OPEN Timer for Resource

Timer: Closed Timer for Resource AA-8NA

04/23/2022 11:14:32 TGF A-8NA OFF ALM EN ROUTE CERRO PELADO 0+1 MIN ETE 2 SOB
 4+0 FOB// +AFF// POS COMS ON NATL

04/23/2022 11:14:47 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 147 knots
 Heading: 255° true Altitude: 11,577' msl Make: Rockwell International Model: 690B Lat: 35°

45.2202' Long: -106° 30.9702' Time: 04/23/2022 11:13:14 UTC-0600
 04/23/2022 17:27:28 TGF ONTG ABQ

Timer: Closed Timer for Resource AA-8NA

04/24/2022 09:18:08 TGF AA8NA OFF ABQ 3 SOB 4.15 FOB 5 ETA T CERRO PELADO +AFF

04/24/2022 09:18:20 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 225 knots
 Heading: 357° true Altitude: 11,532' msl Make: Rockwell International Model: 690B Lat: 35°

34.7802' Long: -106° 34.5696' Time: 04/24/2022 09:16:34 UTC-0600

04/24/2022 09:34:09 TGF OK:

04/24/2022 09:43:49 TGF FF local

04/24/2022 10:00:31 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 167 knots

Heading: 261° true Altitude: 11,541' msl Make: Rockwell International Model: 690B Lat: 35°
 45.0900' Long: -106° 32.2998' Time: 04/24/2022 09:58:46 UTC-0600

04/24/2022 11:56:11 TGF AA-8NA OFF CERRO > ABQ 0+110 ETE +AFF +COMMS LOCAL

04/24/2022 11:56:30 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 190 knots
 Heading: 185° true Altitude: 11,692' msl Make: Rockwell International Model: 690B Lat: 35°

34.9500' Long: -106° 32.0700' Time: 04/24/2022 11:53:42 UTC-0600

04/24/2022 11:56:36 TGF FF ABC

Timer: Closed Timer for Resource H-7HE

04/24/2022 12:30:54 TGF 7HE > TA-49 4 SOB 1+45 FOB +AFF -COMMS

04/24/2022 12:31:28 TGF OK: Registration: N7HE Callsign: H-7HE Speed: 0 knots Heading:
 247° true Altitude: 10,065' msl Make: Aerospatiale Model: AS-350B3 Lat: 35° 47.0520' Long:
 -106° 32.9874' Time: 04/24/2022 11:23:23 UTC-0600

04/24/2022 12:37:13 TGF ONTG TA-49

Timer: Closed Timer for Resource N40Y

04/25/2022 11:50:53 DKA OK: e/r to the Cerro Pelado fire from the Crooks fire in AZ

04/25/2022 11:51:15 DKA OK: Registration: N40Y Callsign: N-40Y Speed: 250 knots Heading:
 74° true Altitude: 17,739' msl Make: Raytheon Model: A200CT Lat: 35° 2.5704' Long: -109°
 52.1304' Time: 04/25/2022 11:49:49 UTC-0600

04/25/2022 12:04:22 DKA OK:

04/25/2022 12:16:28 DKA OK:

04/25/2022 12:17:24 DKA OK: Registration: N40Y Callsign: N-40Y Speed: 258 knots Heading:
 72° true Altitude: 17,709' msl Make: Raytheon Model: A200CT Lat: 35° 27.6498' Long: -107°
 48.1698' Time: 04/25/2022 12:14:46 UTC-0600

04/25/2022 12:32:02 DKA OK:

04/25/2022 12:42:29 DKA OK: over the fire

04/25/2022 12:56:13 DKA OK:

04/25/2022 13:08:27 DKA OK:

04/25/2022 13:09:00 DKA OK: departing Cerro Pelado Fire to Calf Canyon Fire

04/25/2022 13:16:25 DKA OK: in contact with AA

04/25/2022 13:31:09 DKA OK: over the fire

04/25/2022 13:46:07 DKA OK:

04/25/2022 13:56:52 DKA OK:

04/25/2022 13:57:47 DKA OK: e/r to SAF 10 ete

Case 1:25-cv-00382-KRS Document 1-5 Filed 04/21/25 Page 67 of 231

04/25/2022 14:25:11 DKA OK:

04/25/2022 14:38:17 DKA OK:

04/25/2022 14:48:40 DKA OK:

04/25/2022 15:03:13 DKA OK:

04/25/2022 15:19:04 DKA OK:

04/25/2022 15:35:04 DKA OK:

04/25/2022 15:52:22 DKA OK:

04/25/2022 16:08:12 DKA OK:

04/25/2022 16:24:55 DKA OK:

04/25/2022 16:30:50 DKA OK: FF with ABC

Timer: Closed Timer for Resource H 7HE

04/25/2022 12:48:04 DKA OK: e/r the fire 3sob 1:55 fob 5 ete +AFF

04/25/2022 12:48:46 DKA OK: Registration: N7HE Callsign: H-7HE Speed: 80 knots Heading: 267° true Altitude: 8,694' msl Make: Aerospatiale Model: AS-350B3 Lat: 35° 49.3518' Long: -106° 20.6466' Time: 04/25/2022 12:46:38 UTC-0600

04/25/2022 13:03:41 DKA OK: over the fire

04/25/2022 13:13:31 DKA OK:

04/25/2022 13:20:45 DKA OK:

04/25/2022 13:31:30 DKA OK:

04/25/2022 13:46:03 DKA OK:

04/25/2022 13:48:51 DKA OK: OTG TA 49

04/25/2022 16:52:38 DKA OK: e/r from Cooks Peak fire to TA49

04/25/2022 17:02:38 DKA OK: Registration: N7HE Callsign: H-7HE Speed: 119 knots Heading: 239° true Altitude: 9,481' msl Make: Aerospatiale Model: AS-350B3 Lat: 36° 1.2102' Long: -105° 45.9846' Time: 04/25/2022 17:01:13 UTC-0600

04/25/2022 17:05:52 DKA OK: 10 ete to TA 49

04/25/2022 17:20:36 DKA OK:

04/25/2022 17:20:39 DKA OK:

04/25/2022 17:20:56 DKA OK: Landing TA 49

Timer: Closed Timer for Resource N78NA

04/25/2022 13:01:51 DKA OK: Off ABQ e/r to the fire 10ete +AFF

04/25/2022 13:02:01 DKA OK: Registration: N78NA Callsign: N-78NA Speed: 167 knots Heading: 360° true Altitude: 8,730' msl Make: Rockwell International Model: 690B Lat: 35° 5.8698' Long: -106° 33.6102' Time: 04/25/2022 13:00:06 UTC-0600

04/25/2022 13:13:04 DKA OK: over the fire

04/25/2022 13:28:03 DKA OK:

04/25/2022 13:43:36 DKA OK:

04/25/2022 13:52:03 DKA OK:

04/25/2022 14:08:03 DKA OK:

04/25/2022 14:23:10 DKA OK:

04/25/2022 14:38:04 DKA OK:

04/25/2022 14:48:32 DKA OK:

04/25/2022 14:53:24 DKA OK: Registration: N7HE Callsign: H-7HE Speed: 125 knots Heading: 46° true Altitude: 7,762' msl Make: Aerospatiale Model: AS-350B3 Lat: 35° 55.5018' Long: -105° 57.7284' Time: 04/25/2022 14:50:37 UTC-0600

04/25/2022 15:08:12 DKA OK:

04/25/2022 15:23:13 DKA OK:

04/25/2022 15:36:02 DKA OK:

04/25/2022 15:46:54 DKA OK:

04/25/2022 16:01:01 DKA OK:

04/25/2022 16:01:04 DKA OK:

04/25/2022 16:16:04 DKA OK:

04/25/2022 16:31:15 DKA OK:

04/25/2022 16:46:11 DKA OK:

04/25/2022 17:01:06 DKA OK:

04/25/2022 17:11:38 DKA OK:

04/25/2022 17:21:22 DKA OK: FF with ABQ

Timer: Closed Timer for Resource N364WA

04/25/2022 16:57:04 DKA OK: e/r to the fire from ABQ

04/25/2022 17:04:05 DKA OK: Registration: N364WA Callsign: N-364WA Speed: 159 knots

Heading: 356° true Altitude: 8,329' msl Make: Aero Commander Model: 690B Lat: 35° 5.6700'

Long: -106° 33.6504' Time: 04/25/2022 17:02:53 UTC-0600

04/25/2022 17:04:39 DKA OK: 2sob 4.3 fob 10 ete

04/25/2022 17:15:01 DKA OK: Tied in with AA and is over the fire

04/25/2022 17:30:05 DKA OK:

04/25/2022 17:43:45 DKA OK:

04/25/2022 17:58:11 DKA OK:

04/25/2022 18:11:35 DKA OK:

04/25/2022 18:27:19 DKA OK:

04/25/2022 18:42:08 DKA OK:

04/25/2022 18:55:18 DKA OK: off the fire e/r to ABQ 15ete

04/25/2022 19:04:18 DKA OK: FF with ABC

Timer: Closed Timer for Resource H-7HE

04/26/2022 12:37:52 TGF OK: Registration: N7HE Callsign: H-7HE Speed: 111 knots Heading:

258° true Altitude: 9,845' msl Make: Aerospatiale Model: AS-350B3 Lat: 35° 48.1800' Long:

-106° 29.9982' Time: 04/26/2022 12:35:49 UTC-0600

04/26/2022 12:38:56 TGF OFF TA-49 > CERRO PELADO (on scene) 3 SOB 1+45 FOB 0+5 ETE +AFF +COMMS CP

04/26/2022 12:43:19 TGF ONTG 860 configuring for RECON

04/26/2022 13:10:33 TGF Started RECON 4 SOB 2+0 FOB Planning one hour +AFF +COMMS

04/26/2022 13:10:47 TGF OK: Registration: N7HE Callsign: H-7HE Speed: 65 knots Heading:

223° true Altitude: 9,458' msl Make: Aerospatiale Model: AS-350B3 Lat: 35° 46.6242' Long:

-106° 36.4362' Time: 04/26/2022 13:07:53 UTC-0600

04/26/2022 13:36:32 DKA OK:

04/26/2022 13:36:42 DKA OK: over the fire

04/26/2022 13:51:32 DKA OK:

04/26/2022 13:55:17 DKA OK: e/r to TA 49 10min ete

04/26/2022 14:04:02 DKA OK: landed TA 49

Timer: Closed Timer for Resource AA 8NA

04/26/2022 14:00:07 DKA OK: 3sob 4.5fob 10ete +AFF

04/26/2022 14:00:17 DKA OK: Registration: N78NA Callsign: N-78NA Speed: 252 knots

Heading: 9° true Altitude: 11,712' msl Make: Rockwell International Model: 690B Lat: 35°

25.9902' Long: -106° 39.4500' Time: 04/26/2022 13:58:34 UTC-0600

04/26/2022 14:10:18 DKA OK:

04/26/2022 14:21:53 DKA OK: over the fire

04/26/2022 14:36:14 DKA OK:

04/26/2022 14:51:08 DKA OK:

04/26/2022 15:01:13 DKA OK:

04/26/2022 15:01:22 DKA OK:

04/26/2022 15:31:23 DKA OK:

04/26/2022 15:43:20 DKA OK:

04/26/2022 16:06:44 DKA OK:

04/26/2022 16:25:54 DKA OK:

04/26/2022 16:55:13 DKA OK:

04/26/2022 16:57:03 DKA OK: e/r to ALM 45 ete

04/26/2022 16:59:22 DKA OK: FF with ABC

Timer: Closed Timer for Resource AA-8NA

04/27/2022 10:23:35 TGF AA-8NA OFF ABQ>PELADO 3 SOB 3.25 FOB 5 ETE +AFF +COMMS

04/27/2022 10:23:46 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 254 knots

Heading: 343° true Altitude: 11,748' msl Make: Rockwell International Model: 690B Lat: 35°

38.2500' Long: -106° 34.1400' Time: 04/27/2022 10:22:41 UTC-0600

04/27/2022 16:36:53 TGF ONTG ABQ

Timer: Closed Timer for Resource AA-4WA

04/27/2022 14:11:09 TGF AA-4WA OFF ABQ > CERRO 3 SOB 3+45 FOB 0+5 ETE +COMMS
LOCAL +AFF

04/27/2022 14:11:25 TGF OK: Registration: N364WA Callsign: N-364WA Speed: 235 knots
Heading: 15° true Altitude: 12,201' msl Make: Aero Commander Model: 690B Lat: 35° 28.6500'
Long: -106° 38.3298' Time: 04/27/2022 14:08:19 UTC-0600

04/27/2022 16:36:42 TGF Assumed AA ff local

04/27/2022 17:50:53 TGF AA-4WA OFF CERRO > ABQ 0+13 ETE +AFF +COMMS LOCAL

04/27/2022 17:51:07 TGF FF ABC

Timer: Closed Timer for Resource AA-8NA

04/29/2022 09:00:09 TGF AA-8NA OFF ABQ>PELADO 3 SOB 4.5 FOB 10 ETE +AFF

04/29/2022 09:00:21 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 171 knots
Heading: 358° true Altitude: 8,097' msl Make: Rockwell International Model: 690B Lat: 35°
6.3798' Long: -106° 34.0800' Time: 04/29/2022 08:57:52 UTC-0600

04/29/2022 09:16:14 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 190 knots
Heading: 201° true Altitude: 11,869' msl Make: Rockwell International Model: 690B Lat: 35°
46.8900' Long: -106° 26.0100' Time: 04/29/2022 09:14:52 UTC-0600

04/29/2022 09:25:41 TGF AA-8NA OFF ABQ>PELADO 3 SOB 4.5 FOB 10 ETE +AFF

04/29/2022 09:28:53 TGF Disregard last

04/29/2022 12:07:41 TGF AA-8NA OFF CERRO > ABQ 0+10 ETE +COMMS LOCAL +AFF

04/29/2022 12:51:45 TGF ONTG ABQ

Timer: Closed Timer for Resource L-7 (t)

04/29/2022 11:12:58 TGF Lead 7(t) > Cerro Pelado 3 SOB 3 15 FOB 5 ETE +AFF +COMMS

04/29/2022 11:13:14 TGF OK: Registration: N162GC Callsign: LP-2GC Speed: 264 knots
Heading: 78° true Altitude: 17,391' msl Make: Beechcraft Model: B200 Lat: 35° 48.5880' Long:
-106° 59.4840' Time: 04/29/2022 11:11:34 UTC-0600

04/29/2022 11:41:30 TGF OFF CERRO > ABQ +COMMS w/ ABC

Timer: Closed Timer for Resource AA-4WA

04/29/2022 11:53:11 TGF AA-4WA OFF ABQ> PELADO 3 SOB 4.5 FOB 15 ETE PELADO + AFF

04/29/2022 11:53:20 TGF OK: Registration: N364WA Callsign: N-364WA Speed: 221 knots
Heading: 10° true Altitude: 13,175' msl Make: Aero Commander Model: 690B Lat: 35° 28.2900'
Long: -106° 32.9802' Time: 04/29/2022 11:51:21 UTC-0600

04/29/2022 12:52:05 TGF AA-4WA OFF CERRO > ABQ 0+12 ETE +AFF +COMMS LOCAL

04/29/2022 12:52:17 TGF OK: Registration: N364WA Callsign: N-364WA Speed: 184 knots
Heading: 189° true Altitude: 11,115' msl Make: Aero Commander Model: 690B Lat: 35° 42.6198'
Long: -106° 31.3602' Time: 04/29/2022 12:51:00 UTC-0600

04/29/2022 13:51:13 TGF ONTG ABQ

Timer: Closed Timer for Resource AA-8NA

04/30/2022 09:36:30 TGF AA-8NA OFF ABQ > PELADO 3 SOB 4.30 FOB 5 ETE +AFF
+COMMS

04/30/2022 09:36:43 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 184 knots
Heading: 358° true Altitude: 10,482' msl Make: Rockwell International Model: 690B Lat: 35°
26.5800' Long: -106° 33.6900' Time: 04/30/2022 09:35:01 UTC-0600

04/30/2022 09:43:08 TGF Assuming Cerro AA ff local

04/30/2022 12:45:59 TGF AA-8NA OFF CALF > ABQ 010 ETE +AFF +COMMS

04/30/2022 12:46:12 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 221 knots
Heading: 177° true Altitude: 11,689' msl Make: Rockwell International Model: 690B Lat: 35°
37.1604' Long: -106° 34.8402' Time: 04/30/2022 12:44:06 UTC-0600

04/30/2022 12:46:19 TGF FF w/ ABC

04/30/2022 15:10:01 TGF AA-8NA ABQ>CERRO PLADO 3 SOB 4+30 FOB 0+10ETE +AFF
+COMMS

04/30/2022 15:10:14 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 186 knots
Heading: 1° true Altitude: 12,522' msl Make: Rockwell International Model: 690B Lat: 35°
18.6600' Long: -106° 33.6504' Time: 04/30/2022 15:07:18 UTC-0600

04/30/2022 16:38:48 TGF Assumed AA ff local

04/30/2022 18:00:17 TGF AA-8NA OFF CERRO > ABQ 0+10 ETE +COMMS +AFF

04/30/2022 18:00:29 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 217 knots
Heading: 185° true Altitude: 11,197' msl Make: Rockwell International Model: 690B Lat: 35°
28.5600' Long: -106° 33.1902' Time: 04/30/2022 17:58:11 UTC-0600

04/30/2022 18:01:12 TGF FF w/ ABC

Timer: Closed Timer for Resource T-101

04/26/2022 14:44:33 DKA OK: ..
 04/26/2022 14:59:08 DKA OK:
 04/26/2022 15:01:02 DKA OK: over the fire
 04/26/2022 15:14:31 DKA OK:
 04/26/2022 15:15:28 DKA OK: 3sob 3fob
 04/26/2022 15:24:58 DKA OK:
 04/26/2022 15:49:51 DKA OK:
 04/26/2022 16:19:16 DKA OK:
 04/26/2022 16:50:17 DKA OK:
 04/26/2022 17:18:21 DKA OK: Off the fire for a hold

04/26/2022 17:21:57 DKA OK: FF with ABC

Timer: Closed Timer for Resource T-102

04/26/2022 14:44:53 DKA OK: ...
 04/26/2022 14:59:06 DKA OK: ei
 04/26/2022 15:09:44 DKA OK: Off ABQ
 04/26/2022 15:24:46 DKA OK: over the fire
 04/26/2022 15:24:51 DKA OK:
 04/26/2022 15:49:55 DKA OK:
 04/26/2022 16:19:11 DKA OK:
 04/26/2022 16:25:25 DKA OK:
 04/26/2022 16:55:15 DKA OK:
 04/26/2022 17:25:07 DKA OK:
 04/26/2022 17:28:49 DKA OK: FF with ABC

Timer: Closed Timer for Resource Lead 42 t

04/26/2022 14:45:12 DKA OK: ...
 04/26/2022 14:48:24 DKA OK: off abq 2sob 6fob 20 ete
 04/26/2022 15:00:48 DKA OK: on the fire
 04/26/2022 15:00:49 DKA OK:
 04/26/2022 15:14:05 DKA OK:
 04/26/2022 15:25:06 DKA OK:
 04/26/2022 15:49:43 DKA OK:
 04/26/2022 16:19:13 DKA OK:
 04/26/2022 16:50:14 DKA OK:
 04/26/2022 17:20:28 DKA OK:
 04/26/2022 17:34:05 DKA OK: FF with ABC

Timer: Closed Timer for Resource AA-506

04/26/2022 16:02:42 DKA OK: off ALM 2sob 4.5fob 1hr ete +AFF
 04/26/2022 16:04:13 DKA OK: Registration: N690HB Callsign: N-690HB Speed: 223 knots
 Heading: 360° true Altitude: 12,939' msl Make: Aero Commander Model: 690A Lat: 33° 14.7798'
 Long: -105° 59.1702' Time: 04/26/2022 16:02:42 UTC-0600
 04/26/2022 16:19:07 DKA OK:
 04/26/2022 16:20:25 DKA OK: Registration: N690HB Callsign: N-690HB Speed: 192 knots
 Heading: 348° true Altitude: 12,804' msl Make: Aero Commander Model: 690A Lat: 34° 17.6898'
 Long: -106° 1.1304' Time: 04/26/2022 16:19:42 UTC-0600
 04/26/2022 16:35:14 DKA OK: Registration: N690HB Callsign: N-690HB Speed: 198 knots
 Heading: 347° true Altitude: 12,867' msl Make: Aero Commander Model: 690A Lat: 34° 59.5302'
 Long: -106° 15.0396' Time: 04/26/2022 16:32:29 UTC-0600
 04/26/2022 16:41:23 DKA OK: Registration: N690HB Callsign: N-690HB Speed: 202 knots
 Heading: 348° true Altitude: 12,831' msl Make: Aero Commander Model: 690A Lat: 35° 18.6102'
 Long: -106° 21.7998' Time: 04/26/2022 16:38:20 UTC-0600
 04/26/2022 16:47:51 DKA OK: in contact with AA over the fire
 04/26/2022 16:47:57 DKA OK:
 04/26/2022 17:29:36 DKA OK: over the fire
 04/26/2022 18:14:03 DKA OK:
 04/26/2022 18:46:42 DKA OK: FF with ABC
 04/26/2022 18:46:43 DKA OK:

Timer: Closed Timer for Resource T-912

04/26/2022 16:28:42 DKA OK: off COS e/r to the fire
 04/26/2022 16:29:04 DKA OK: Registration: N522AX Callsign: T-912 Speed: 259 knots Heading: 179° true Altitude: 8,900' msl Make: Douglas Model: DC-10-30 Lat: 38° 42.2988' Long: -104° 42.8922' Time: 04/26/2022 16:27:54 UTC-0600
 04/26/2022 16:35:35 DKA OK: 3sob 3fob 40ete +AFF
 04/26/2022 17:05:28 DKA OK: over the fire
 04/26/2022 17:29:04 DKA OK:
 04/26/2022 17:29:13 DKA OK: Registration: N522AX Callsign: T-912 Speed: 397 knots Heading: 35° true Altitude: 15,951' msl Make: Douglas Model: DC-10-30 Lat: 37° 6.2184' Long: -105° 31.6194' Time: 04/26/2022 17:28:21 UTC-0600

Timer: Closed Timer for Resource AA-5AB

04/30/2022 12:19:01 TGF AA-5AB > Cerra Pelado 2-SOB, 3+50-FOB, 10 ETE +AFF
 04/30/2022 12:19:27 TGF OK: Registration: N985AB Callsign: N-985AB Speed: 211 knots Heading: 81° true Altitude: 15,780' msl Make: Beechcraft Model: C90A Lat: 35° 44.5872' Long: -107° 10.5612' Time: 04/30/2022 12:16:51 UTC-0600
 04/30/2022 13:44:13 TGF Assumed CERRO AA ff local
 04/30/2022 15:17:55 TGF AA-5AB OFF CERRO > ABQ 2 SOB 1+30 FOB 0+15 ETE +COMSS +AFF
 04/30/2022 15:18:15 TGF OK: Registration: N985AB Callsign: N-985AB Speed: 145 knots Heading: 177° true Altitude: 11,515' msl Make: Beechcraft Model: C90A Lat: 35° 43.9230' Long: -106° 31.2924' Time: 04/30/2022 15:16:55 UTC-0600
 04/30/2022 16:38:36 TGF ONTG ABQ
 04/30/2022 18:00:42 TGF AA-5AB^ABQ>CERRO PELADO 2 SOB 4+5 FOB 0+15 ETE+COMMS +AFF

04/30/2022 18:00:53 TGF OK: Registration: N985AB Callsign: N-985AB Speed: 167 knots Heading: 314° true Altitude: 11,843' msl Make: Beechcraft Model: C90A Lat: 35° 42.1566' Long: -106° 32.9916' Time: 04/30/2022 17:58:40 UTC-0600

04/30/2022 18:01:04 TGF Assuming AA ff local

04/30/2022 19:30:27 TGF FF w/ ABC

Timer: Closed Timer for Resource AA-8NA

05/01/2022 08:21:01 TGF AA-8NA OFF ABQ > PELADO 3 SOB 4+15 FOB 0+5 ETE +AFF +COMMS

05/01/2022 08:21:14 TGF OK: Registration: N78NA Callsign: N-78NA Speed: 268 knots Heading: 0° true Altitude: 11,679' msl Make: Rockwell International Model: 690B Lat: 35° 30.7302' Long: -106° 32.5404' Time: 05/01/2022 08:18:29 UTC-0600

05/01/2022 08:44:38 TGF Assuming Cerro AA ff/ local

05/01/2022 11:47:53 TGF OFF CERRO > ABQ 0+10 ETE +COMMS LOCAL +AFF

05/01/2022 11:47:59 TGF ONTG ABQ

05/01/2022 17:08:22 TGF ONTG ABQ

Timer: Closed Timer for Resource AA-4WA

05/01/2022 11:30:00 TGF OK: Registration: N364WA Callsign: N-364WA Speed: 276 knots Heading: 7° true Altitude: 12,768' msl Make: Aero Commander Model: 690B Lat: 35° 17.1402' Long: -106° 30.4200' Time: 05/01/2022 11:27:46 UTC-0600

05/01/2022 11:30:30 TGF AA-4WA OFF ABQ>PELADO 2 SOB 4.15 FOB 5 ETE +AFF

05/01/2022 17:08:13 TGF ONTG ABQ

Timer: Closed Timer for Resource N400DS AA210

04/28/2022 12:48:15 DKA OK: off Durango e/r Cerro Pelado

04/28/2022 13:03:05 DKA OK:

04/28/2022 13:03:09 DKA OK: 10 min ete

04/28/2022 13:14:38 DKA OK: over the fire

04/28/2022 13:14:44 DKA OK:

04/28/2022 13:44:07 DKA OK:

04/28/2022 14:14:16 DKA OK:

04/28/2022 14:44:07 DKA OK:

04/28/2022 15:12:48 DKA OK:

04/28/2022 15:57:03 DKA OK:

04/28/2022 16:25:37 DKA OK:

04/28/2022 16:44:30 DKA OK: Off the fire e/r Durango 1:30fob 25 ete

04/28/2022 17:00:25 DKA OK:

04/28/2022 17:00:39 DKA OK: Registration: N400DS Callsign: N-400DS Speed: 213 knots

~~Heading: 4324° true Altitude: 12,791' msl Make: Rockwell International Model: 690B Lat: 36° 37.0902' Long: -107° 11.7900' Time: 04/28/2022 16:59:36 UTC-0600~~

04/28/2022 17:08:26 DKA OK: FF with Durango Dispatch

Timer: Closed Timer for Resource N985AB

04/28/2022 16:07:50 DKA OK: e/r to the incident 2sob 4.5fob
 04/28/2022 16:22:18 DKA OK: Registration: N985AB Callsign: N-985AB Speed: 240 knots
 Heading: 81° true Altitude: 15,911' msl Make: Beechcraft Model: C90A Lat: 35° 42.7128' Long:
 -107° 26.4900' Time: 04/28/2022 16:20:31 UTC-0600
 04/28/2022 16:37:10 DKA OK: over the fire
 04/28/2022 17:08:38 DKA OK:
 04/28/2022 17:53:05 DKA OK:
 04/28/2022 18:39:07 DKA OK:
 04/28/2022 18:54:36 DKA OK: Released e/r to Flagstaff 2s 2fob 1hr ete
 04/28/2022 18:54:46 DKA OK: FF with ABC

Timer: Closed Timer for Resource 7HE

04/23/2022 08:22:43 TGF OK:
 04/23/2022 08:25:53 TGF OK: Registration: N7HE Callsign: H-7HE Speed: 94 knots Heading:
 26° true Altitude: 9,074' msl Make: Aerospatiale Model: AS-350B3 Lat: 35° 44.5722' Long: -106°
 36.1380' Time: 04/23/2022 08:24:59 UTC-0600
 04/23/2022 08:29:09 TGF > Cerro Pelado 4 SOB 2+30 FOB 0+15 ETE +AFF +COMMS
 04/23/2022 08:40:03 TGF OK:
 04/23/2022 09:20:04 TGF OK: Registration: N7HE Callsign: H-7HE Speed: 76 knots Heading:
 151° true Altitude: 9,140' msl Make: Aerospatiale Model: AS-350B3 Lat: 35° 46.0236' Long:
 -106° 35.3034' Time: 04/23/2022 09:17:46 UTC-0600

04/23/2022 09:59:31 TGF ONTG TA-49

Timer: Closed Timer for Resource FW-51

04/23/2022 11:06:12 TGF OK: Registration: N40Y Callsign: N-40Y Speed: 272 knots Heading:
 63° true Altitude: 17,558' msl Make: Raytheon Model: A200CT Lat: 35° 29.0100' Long: -107°
 16.3398' Time: 04/23/2022 11:05:11 UTC-0600
 04/23/2022 11:07:09 TGF FW-51(N40Y) off FFZ>>Cerro Pelado 3.0 SOB 4.0 FOB +2 ETE +AFF
 Comms Natl

04/23/2022 17:27:57 TGF > FALCON 1+15 ETE +COMMS +AFF

04/23/2022 17:28:24 TGF OK: Registration: N40Y Callsign: N-40Y Speed: 178 knots Heading:
 244° true Altitude: 16,682' msl Make: Raytheon Model: A200CT Lat: 36° 6.5298' Long: -105°
 30.5202' Time: 04/23/2022 17:26:40 UTC-0600

04/23/2022 17:44:01 TGF FF ABQ

Incident Commander(s):

04/22/2022 1625 (b) (6), (b) (7)(C) ICT4 Effective 1615 4/22/22
 04/22/2022 1817 (b) (6), (b) (7)(C) ICT3 Effective 1815 4/22/2022
 04/23/2022 2012 (b) (6), (b) (7)(C) Effective 2000 04/23/2022
 04/23/2022 2013 (b) (6), (b) (7)(C) ICT3 Effective
 04/24/2022 0729 (b) (6), (b) (7)(C) ICT1 Effective 0730 4/24/2022 Southern Area Red Team assumed
 command at 0730 on 4/24/2022
 04/24/2022 0730 Effective
 04/24/2022 0730 (b) (6), (b) (7)(C) ICT3 Effective
 04/24/2022 1756 (b) (6), (b) (7)(C) ICT1 Effective

Resource Details:***E-2601:**

Committed at 04/22/2022 15:41:14, On Scene at 04/22/2022 16:15:18, Released at 04/22/2022
 21:09:24, Committed at 04/22/2022 21:11:05, On Scene at 04/22/2022 21:11:14, Released at
 04/28/2022 09:03:29

BAP E-692:

Committed at 04/22/2022 15:41:09, On Scene at 04/22/2022 16:15:18, Released at 04/27/2022
 15:05:18

CAF E-631:

Committed at 04/28/2022 06:33:12, Returning at 04/28/2022 06:53:53, Released at 04/28/2022
 06:54:06

E-431:

Committed at 04/22/2022 15:45:52, On Scene at 04/22/2022 17:45:06, Released at 04/22/2022
 22:46:54, Committed at 04/23/2022 06:59:11, On Scene at 04/23/2022 06:59:16, Released at
 04/24/2022 19:41:18, Committed at 04/25/2022 06:32:49, Released at 04/25/2022 20:49:56,
 Committed at 04/26/2022 06:26:07, Returning at 04/26/2022 21:32:38, Released at 04/26/2022
 21:33:41, Committed at 04/29/2022 08:39:15, Released at 04/29/2022 21:15:12, Committed at
 04/30/2022 08:29:58, Released at 05/01/2022 03:58:26, Committed at 05/01/2022 14:36:09,
 Released at 05/01/2022 20:04:52

E-631:

Committed at 04/28/2022 06:54:54, Released at 04/28/2022 13:37:01

N6S E-61:

Committed at 04/22/2022 19:25:30, On Scene at 04/22/2022 19:26:02, Released at 04/30/2022 07:19:52

UT-431:

Committed at 04/22/2022 15:58:28, On Scene at 04/22/2022 17:45:06, Released at 04/22/2022 22:46:54, Committed at 04/24/2022 06:26:29, Released at 04/24/2022 19:41:18, Committed at 04/25/2022 06:32:49, Released at 04/25/2022 20:49:56, Committed at 04/26/2022 06:25:35, Returning at 04/26/2022 22:50:10, Released at 04/26/2022 22:50:33, Committed at 04/29/2022 08:39:43, Released at 04/29/2022 21:50:09, Committed at 04/30/2022 08:29:58, Released at 05/01/2022 03:33:26, Committed at 05/01/2022 14:36:09, Released at 05/01/2022 20:04:52

UT-631:

Committed at 04/22/2022 15:51:05, On Scene at 04/22/2022 16:36:02, Returning at 04/23/2022 20:51:37, Released at 04/23/2022 20:52:02, Committed at 04/25/2022 06:35:21, Released at 04/25/2022 20:50:03, Committed at 04/26/2022 08:30:29, Released at 04/26/2022 11:57:01, Committed at 04/28/2022 06:55:36, Released at 04/28/2022 13:37:01

N7HE:

Committed at 04/23/2022 11:45:28, Released at 04/25/2022 12:43:21

FS 28:

Committed at 04/22/2022 17:02:47, On Scene at 04/22/2022 17:44:59, Released at 04/23/2022 06:30:52, Committed at 04/23/2022 13:36:15, On Scene at 04/23/2022 13:36:18, Released at 04/23/2022 18:18:32

DIV 10-3:

Committed at 04/22/2022 15:44:28, On Scene at 04/22/2022 16:36:02, Released at 04/22/2022 23:06:43, Committed at 04/23/2022 06:53:45, On Scene at 04/23/2022 06:53:48, Released at 04/23/2022 18:12:40, Committed at 04/25/2022 06:37:55, Released at 04/25/2022 08:30:42

BAT 10-3:

Committed at 04/22/2022 16:21:51, On Scene at 04/22/2022 19:29:58, Released at 04/25/2022 09:00:10

CAPT 431:

Committed at 04/29/2022 08:39:28, Released at 04/30/2022 07:20:23

CAPT 631:

Committed at 04/28/2022 06:28:18, Released at 04/28/2022 13:37:01

ENGR 631:

Committed at 04/30/2022 09:36:45, Released at 04/30/2022 13:27:26

PAT 10-3:

Committed at 04/22/2022 15:44:35, On Scene at 04/22/2022 17:45:06

3-31:

Committed at 04/28/2022 06:31:58, Released at 04/30/2022 07:16:37

3-33:

Committed at 04/28/2022 06:32:15, Released at 04/30/2022 07:16:37

Entry Date/Time	From	To	Details
04/22/2022 15:42:39	cplo	DKA	smoke report
04/22/2022 15:43:00	DKA	2601	please respond
04/22/2022 15:43:05	e 692	DKA	we are enroute
04/22/2022 15:43:31	cplo	dka	heavy black smoke with strong winds
04/22/2022 15:46:20	DIV 10-3	DKA	e/r to the fire send P10-3 and E431
04/22/2022 15:47:26	cplo	DKA	brown smoke about 1 acre. growing pretty good and a large column]
04/22/2022 15:49:54	TGF	Email	Email Smoke Report: Location- FR 270 District- Jemez Estimated Size- UNK Enroute- E-692, DIV 10-3, PT 10-3 Sent to: Jemez District group
04/22/2022 15:51:24	P 10-3	DKA	e/r to the fire
04/22/2022 15:52:40	DKA		Acres set to 1
04/22/2022 15:54:59	cplo	DKA	about 5+ acres. black smoke. looks like it is in logged out area and in heavy timber moving to the NE
04/22/2022 15:56:05	E 431	DKA	& UT 431 e/r to the fire
04/22/2022 15:59:20	E 692	DKA	eyes on the fire estimating 10-15 acres with very high fire behavior in the timber, high potential for spread
04/22/2022 15:59:44	e 2601	DKA	we are on fr 270 and have eyes on it
04/22/2022 16:03:46	Sandvl Cty	DKA	Offering assistance for the fire. La Cueva has some units heading that way
04/22/2022 16:08:13	cplo	d 10-3	approx 40 ac and moving.
04/22/2022 16:12:18	DKA		FireCode Requested
04/22/2022 16:15:02	e 692	DKA	on scene with E 2601 lat/long 35 46.498 x 106 35.078
04/22/2022 16:21:06	P 10-3	DKA	looking like an impact to Hwy 4 need leo to stop traffic. 4a and Hwy 4

Entry Date/Time	From	To	Details
04/22/2022 16:21:45	BAT 10-3	DKA	e/r to the fire
04/22/2022 16:24:54	9-33	DKA	called in size up... requesting ICT3
04/22/2022 16:26:34	P 10-3	D 10-3	I'm going to head to Hwy 4 and start notifying the residences north of the fire
04/22/2022 16:32:37	TGF	San CO	Requesting units for possible evaucations near FR 10 Hwy 4 FR 270 Los Pinos area point of contact is PT 10-3 // copy we are sending units
04/22/2022 16:34:07	IC	DKA	DIV 10-3 and UT 631 on scene
04/22/2022 16:47:09	(b) (6), (b) (7)(C)	DKA	from Sandoval County is responding to Liaison with the County resources
04/22/2022 16:50:16	IC	DKA	request order. 3 type 1 crews. 5 type 6 engines Date and Time needed As Soon As Possible
04/22/2022 16:54:19	D 10-3	DKA	I'm at CPLO and going to take (b) (6), (b) (7) off the tower. CPLO will be o/s
04/22/2022 16:58:09	DKA	IC	No Crews available from Hermits Peak. We can place an order for Type 2 Crews. // ok go ahead and order 3 Type 2 crews
04/22/2022 17:01:05	IC	DKA	place and order for 3 TFLD
04/22/2022 17:02:18	P 103	DKA	first spot found 3/4 mile in SEC 12 south of highway 4
04/22/2022 17:02:39	FS 28	DKA	show me e/r
04/22/2022 17:07:11	IC	DKA	advise 9-31 that there is a high potential for the fire to burn onto the Valles Caldera
04/22/2022 17:07:36	DKA	9-31	advised (b) (6), (b) (7)(C) and he copied all (b) (6), (b) (7)
04/22/2022 17:21:23	DIV 10-3	DKA	Got (b) (6), (b) (7) off the Tower he's tied in to UT431
04/22/2022 17:23:41	DKA		Acres set to 50
04/22/2022 17:28:38	E 1441	DKA	BLM E1441 is e/r from ABQ
04/22/2022 17:29:24	IC	DKA	Update main hed in SEC 13 Los Griegos Area
04/22/2022 17:31:40	P 10-3	DKA	north end: fire on the western aspect of los griegos SEC 18. The fire is skirting the SE corner of Cerro de Los Pinos as well
04/22/2022 17:34:45	JMEC	DKA	(b) (6), (b) (7)(C) all power de-energized at Cerro LosPinos and Los Griegos
04/22/2022 17:44:53	FS 28	DKA	on scene and the Sandoval SO is going to close FR 10 at Hwy 290
04/22/2022 18:01:34	IC	DKA	Update: Estimating approximately 400-500 acres
04/22/2022 18:16:45	BAT 10-3	DKA	on scene and I will assume command at this time
04/22/2022 18:27:10	IC	DKA	would like to see if the order for Firewatch 51 was placed and if you have confirmation. // One of our dispatchers (TMF) mentioned you had called and said not to order it due to the amount of activity going on. // hmm.. Well I'd like to place the order for Firewatch 51 for today and if not for tomorrow morning if possible.
04/22/2022 18:38:45	LAFD	DKA	we sent resources as a mutual aid request from Sandoval County. Brush 5,7 & 8. Tactical Tender 5, CH 5 (Todd Forsythe)
04/22/2022 18:46:57	IC	DKA	I have the community of Cochiti Mesa on a Go Status for Evac. The residences on 289/36 are in a SET status. I'm working with Sandoval County to do the notifications.
04/22/2022 18:59:47	IC	DKA	Fire is continuing to move to the north. I have P10-3 as DIV A and (b) (6), (b) (7)(C) at DIV Z. The fire behavior is such that we cannot engage the shoulders or head.
04/22/2022 19:00:44	IC	DKA	also, fire is spotting ahead of itself and have one confirmed spot north of Hwy 4
04/22/2022 19:23:58	IC	DKA	Update on resources: Bernalillo 2, NNSF E-61 and NMSF Module w/4. NMSF is sending up a dozer from the fire in Belen it is a Type 2. no ETA. Also, Requesting H 7HE for tomorrow if they are available to fly
04/22/2022 19:33:40	IC	DKA	update: LAFD Chief 5 and Task force working the spot across hwy 4 and making good progress. it is by Las Conchas Trailhead
04/22/2022 19:42:05	IC	DKA	Update: fire scar is not necessarily not a barrier. The south slopes are receptive to fire and the north slopes are acting as a barrier

Entry Date/Time	From	To	Details
04/22/2022 20:33:10	IC	DKA	update: 9-31 on FR 280 a spot to the SE corner of SEC 16. no fire on peralta ridge.
04/22/2022 20:33:37	IC	DKA	Requesting a LSC3
04/22/2022 20:43:43	DKA	IC	Notified the IC that a IMT1 is being ordered for the incident. Date and Time needed is Saturday 4/23/22 at 0900 at the Santa Fe Supervisor Office
04/22/2022 21:21:54	(b) (6), (b) (7)(C)	KSL	Looking for some landmarks to map
04/22/2022 21:46:16	KL	ic	read spot over air and e-mailed it to (b) (6), (b) (7)
04/22/2022 22:27:34	FS 28	KSL	Cleared the fire >> quarters
04/22/2022 22:47:47	E431	KSL	E 431 and UT 431 off the fire>> Jemez
04/22/2022 23:04:54	FS 28	KSL	BIQ o/s
04/22/2022 23:07:22	DIV 10-3	KSL	BAS o/s
04/23/2022 00:25:18	IC	KSL	update: most resources bedding down at this time. fb has decreased, temps hovering near freezing. heading to Div Z, on the east flank to see how far the fire has progressed. Any fill info on overhead orders for TFLDS*S? will check
04/23/2022 06:37:29	IC	KSL	Radio check while (b) (6), (b) (7) is on the phone, no contact, Cerro Pelado is down? (b) (6), (b) (7) doesn't know if they can engage with no comms
04/23/2022 06:53:30	DIV 10-3	DKA	on scene
04/23/2022 07:01:25	E431	KSL	Called in on radio, no contact
04/23/2022 07:41:40	UT 631	DKA	requested Spot wx forecast
04/23/2022 07:57:54	DIV 10-3	DKA	E 431 will be on the fire but available for IA
04/23/2022 08:18:42	DKA	IC	Spot wx is ready
04/23/2022 08:20:55	IC	DKA	Update: Good RH recovery last night, the fire did lay day except on FR 270 in sec 23 it kept moving in the logging slash. Today we will concentrate on point protection. 39 personnel
04/23/2022 09:05:32	IC	DKA	I would like to order 2 National Guard Helos for bucket work to report to TA-49
04/23/2022 09:08:59	DKA	Rob Brown	The IC is requesting two NM Air Guard Helos for bucket work // copy, I will make some calls
04/23/2022 09:25:43	7HE	TGF	Is there approval for a dipsite at 35 47.04 x 106 32.19 // well check on that and get back with you
04/23/2022 09:38:44	IC	DKA	I would like to order an air attack
04/23/2022 09:45:45	IC	DKA	ready for the spot // read spot
04/23/2022 10:39:24	(b) (6), (b) (7)(C)	DKA	Tied in with the IC
04/23/2022 11:26:28		DKA	The ANG is not available to fly today, but possibly tomorrow. The Bernalillo County helo may be available. I'll call and check
04/23/2022 11:26:45	DKA	IC	Notified of the National Guard unable to fly today
04/23/2022 13:29:43	DKA		Acres set to 3445
04/23/2022 13:30:25	DKA		ADS flipped to Sit/209
04/23/2022 13:36:00	FS 28	DKA	on scene
04/23/2022 18:18:56	FS 28	DKA	Clear of the incident e/r to quarters
04/23/2022 20:14:41	(b) (6), (b) (7)(C)	PL	Will take over as ICT3 at this time. will stay with night ops for observation. 3 in party
04/24/2022 00:13:52	IC	PL	Update fire looks good, no issues at this time, Some activity on NE end near FSR 270c. Will call back in a few hours.
04/24/2022 03:09:45	IC	PL	Looking good, no rel issues to report at this time. will be heading over to transition meeting at 0630
04/24/2022 06:20:53	IC	PL	update, no change from last update. fire is staying up top. staying where we want it for the evening no real issues at this time. slowly backing in the north side Div A fire is staying where we want it where we have control lines. in div z, FDR 270c fire is backing down at about 3 hours per chain. should be no issue until folks get out here and team takes over.
04/24/2022 06:23:59	IC	PL	Announce over radio that Cerro Pelado repeater is not working. Tone 9-Virgin Mesa is working well. For now NO cerro Pelado repeater

Entry Date/Time	From	To	Details
04/24/2022 06:25:44	Eng 431	PL	+ UTIL 431 I/R Cerro Pelado
04/24/2022 07:28:02	(b) (6), (b) (7)(C)	DKA	Departing briefing area e/r to Santa Fe OFFICIAL TRANSFER OF COMMAND TO THE SOUTHERN AREA TYPE 1 IMT IC PARRISH
04/24/2022 09:39:22	Heli 9	DKA	Heli 9 & 8 e/r to the La Jara dipsite
04/24/2022 17:57:08	Heli 9	DKA	Heli 8 & 9 leaving La Jara dip e/r to TA49
04/24/2022 20:58:38	Night ops	PL	2 overhed pluc 1 t6 engie will be on night shift. Fire is looking good above subdivision. <1' flame lengths near FSR 270 & 270c. Do not have coms set up yet wo will check in periodically with santa fe through the night.
04/25/2022 00:00:19	Night ops	PL	Status update, fire is mellowing out. Active fire along FSR 270 270c road area. a few pockets of active fire above the subdivision and fire station, active fire on far east side south of strucres on the 280 road will be bedding engine down shortly. I will continue with patrol and will report back t 0300, then again at the 0700 briefing.
04/25/2022 03:17:40	Night Ops	PL	No real change from last update. Current temperature is 28deg. Will call in again @ 0700
04/25/2022 12:16:19	AOBD	DKA	Requesting AA over the fire // copy, Called SWCC
04/25/2022 13:02:19	AA 8NA	DKA	10 ete to the fire
04/25/2022 13:24:04	AA 8NA	DKA	assuming AA: also would like to order the two LOBO helos
04/25/2022 13:49:03	7HE	DKA	OTG TA 49
04/25/2022 13:56:21	LOBO 31	DKA	w/ LOBO 29 e/r: Each: 7SOB 2:30FOB 20 ete
04/25/2022 14:58:20	LOBO 29	DKA	e/r back to SAF for bucket issue.
04/25/2022 15:00:01	AA	DKA	requesting 3CH and relief at 1700
04/25/2022 15:07:55	LOBO 29	DKA	landing in SAF
04/25/2022 15:46:37	LOBO 31	DKA	e/r to SAF for fuel. 20 min ETE
04/25/2022 16:01:12	LOBO 29	DKA	off SAF e/r 4sob 2:30fob 20 ete LOBO 31 landed SAF
04/25/2022 16:05:01	LOBO 29	DKA	in contact with AA flight follow local
04/25/2022 16:44:23	LOBO 31	DKA	off SAF e/r to the fire 20 ete 3sob 2:30fob
04/25/2022 17:22:57	AA 8NA	DKA	e/r to ABQ ... AA 4WA is now CP AA
04/25/2022 18:01:51	AA	DKA	e/r to SAF to hold
04/25/2022 18:09:12	LOBO 29	DKA	e/r to SAF 20 ete
04/25/2022 18:18:30	LOBO 29	DKA	Landing SAF
04/25/2022 18:39:36	AA	DKA	H3CH is experiencing bucket problems and is returning to SAF. LOBO 31 will be heading back to SAF in a few minutes
04/25/2022 18:42:23	LOBO 31	DKA	e/r SAF ete 20
04/25/2022 18:53:44	LOBO 31	DKA	Landing SAF
04/25/2022 18:55:00	AA 4WA	DKA	Off the fire e/r to ABQ
04/25/2022 20:47:17	Util 431	AJL	Util 431 and Util 631 back at station
04/25/2022 23:21:39	Nigh ops	PL	Update - firing operations, fire creeping back down to FSR 10f, Crew holding down on CC, ready to start parallelin, NE corner by structures a little bit more fire activity tonight than last night., Spots by 280 area, 10 road fire is continuing to back down to 10F. will complete frinig operatons at about 0100
04/26/2022 02:11:00	Night Ops	PL	Completed firing between FSR 270CF and 270CC. Mormon lake and Rocca crews will be heading to ICP for the noght. Engine E-1 is staying out to patrol alon with night ops.
04/26/2022 04:12:31	Night Ops	PL	Engine is heading back to camp. Firing operation has calmed down quite a bit. All went as planned. Just me & division for the rest of the night, will tie in with ops in the morning.
04/26/2022 08:30:42	UT 631	DKA	+2 e/r to the fire
04/26/2022 12:09:24	AOBD	TGF	Would like 3CH to come to the fire (DIV A) ground contact is 2601 // copy
04/26/2022 12:09:53	TGF	(b) (6), (b) (7)(C)	Relayed request // copy I'll send them
04/26/2022 12:54:47	3CH	TGF	Just heard from my pilot that they are having bucket issues and back at SAF // copy that
04/26/2022 12:55:54	TGF	AOBD	Relayed that 3CH is down with bucket issues at SAF // copy that let me talk with OPS and see if they want to order the national guard I will call you back

Entry Date/Time	From	To	Details
04/26/2022 13:01:42	AOBD	TGF	Per OPS they need a T1 on the fire // copy that will call the guard
04/26/2022 13:12:00	TGF	Chuck (NG)	Requesting a T1 to DIV A ground contact 2601 // copy that we will be sending 431
04/26/2022 13:25:19	AOBD	DKA	Requesting AA over the fire
04/26/2022 13:33:16	LOBO 31	DKA	e/r 3sob 2.5fob 20 ete
04/26/2022 13:44:32	LOBO 31	DKA	On scene will be on air to ground until Air Attack arrives on the fire
04/26/2022 14:00:35	7HE	DKA	e/r to TA49 10 ete
04/26/2022 14:00:49	AA 8NA	DKA	10 minutes from the fire
04/26/2022 14:02:37	AA 8NA	DKA	over the fire assuming CP AA
04/26/2022 14:04:25	7HE	DKA	OTG SAF
04/26/2022 14:09:46	AA	DKA	requesting 2 LATS
04/26/2022 14:16:47	AA	DKA	Requesting relief AA at 1700
04/26/2022 14:54:21	LOBO 31	DKA	e/r to SAF 20 min ete
04/26/2022 15:02:10	SWCC	DKA	AA relief will be AA 506 from ALM
04/26/2022 15:27:26	LOBO31	DKA	otg saf
04/26/2022 15:27:55	aa	DKA	requesting vlat
04/26/2022 15:28:39	Iobo 29	DKA	off saf e/r to fire 4sob 2:30fob 20 ete
04/26/2022 15:41:33	LOBO 29	DKA	in contact with AA
04/26/2022 16:02:12	AA 506	DKA	off ALM 2sob 4.5 1 hr ete +AFF
04/26/2022 16:17:00	LOBO 31	DKA	e/r to the fire 3sob 2.f 5 fob
04/26/2022 16:28:26	LOBO 31	DKA	over the fire in contact with AA
04/26/2022 16:30:03	T 912	DKA	VLAT off COS e/r to the fire
04/26/2022 16:35:53	T912	DKA	off COS e/r to the fire 40 ete
04/26/2022 16:57:50	AA 8NA	DKA	off the fire e/r to ALM 45 ete AA 506 is now CP AA
04/26/2022 17:00:52	LOBO 31	DKA	e/r to SAF
04/26/2022 17:11:28	LOBO 31	DKA	Landing SAF
04/26/2022 17:18:43	T 101	DKA	Off the fire for a hold in ABQ
04/26/2022 17:19:24	T 912	DKA	off the fire e/r to COS for a hold ete 35 min
04/26/2022 17:20:45	LOBO 29	DKA	e/r to SAF for fuel
04/26/2022 17:28:08	LOBO 29	DKA	Landing SAF
04/26/2022 17:34:27	LP 42 t	DKA	Off the fire e/r to ABQ
04/26/2022 17:48:59	AA	DKA	Requesting both LOBO helos
04/26/2022 18:14:08	LOBO 29	DKA	off SAF 3sob 2/fob e/r to the fire
04/26/2022 18:20:08	LOBO 31	DKA	Off SAF 4sob 2.5fob 20 min ete
04/26/2022 18:32:59	LOBO 31	DKA	in contact with AA
04/26/2022 18:41:43	AA 506	DKA	off the fire e/r to ALM 1 hr ete
04/26/2022 19:07:48	LOBO 31	DKA	e/r to SAF 20 ete bucket issues.
04/26/2022 19:20:21	LOBO 31	DKA	Landed SAF
04/26/2022 19:44:53	LOBO 29	DKA	e/r back to SAF
04/26/2022 20:09:23	LOBO 29	DKA	OTG SAF
04/26/2022 21:23:31	Night ops	PL	Night ops, Night Div., 2 engines and Mt. Taylor IHC staffing. will do tactical firing on FSR10. Will keep one engine all night. Will give NM-SFC updates every few hours.
04/27/2022 02:38:39	Night ops	PL	Night ops completed for tonight. Completed firing at 0100.. Will monitor for rest of night.
04/27/2022 12:37:33	LOBO 18	TGF	OFF SAF > CERRO PELADO 4 SOB 2+0 FOB 0+10 ETE +COMMS CP
04/27/2022 12:41:07	LOBO 18	TGF	+COMMS AA
04/27/2022 12:41:39	LOBO 29	TGF	OFF SAF > CERRO PELADO 3 SOB 2+0 FOB 0+12 ETE +COMMS CP
04/27/2022 12:51:38	LOBO 29	TGF	+COMMS AA
04/27/2022 14:14:40	LOBO 18	TGF	LOBO 18 and LOBO 29 ONTG SAF
04/27/2022 20:00:55	Night ops	PL	Will be contacting ops for any updates through 2400.; Will only call Santa Fe in case of emergency;
04/28/2022 09:03:16	E2601	KSL	released >> Cuba

Entry Date/Time	From	To	Details
04/28/2022 11:55:43	AOBD	DKA	ordering AA for the fire
04/28/2022 12:48:41	AA 210	DKA	off DUR e/r to the fire
04/28/2022 13:02:31	AA 201	DKA	10 ete to the fire
04/28/2022 13:17:40	AA 201	DKA	over the fire assuming CP AA
04/28/2022 13:37:22	631	KSL	BAS
04/28/2022 14:54:39	AA	DKA	Requesting both LOBO helos
04/28/2022 15:23:36	LOBO 31	DKA	e/r to the fire 4sob 2.5fob 20 ete
04/28/2022 15:55:02	LOBO 31	DKA	Bucket issues e/r to SAF
04/28/2022 16:06:14	LOBO 31	DKA	landing SAF
04/28/2022 16:16:05	AA 5AB	DKA	15 minutes from the incident
04/28/2022 16:45:00	AA 201	DKA	off the fire AA 5AB is now CP AA
04/28/2022 17:10:35	LOBO 55	DKA	Landing SAF
04/28/2022 17:57:53	LOBO 55	DKA	Off SAF e/r to the fire 4sob 2fob
04/28/2022 18:18:52	AA	DKA	LOBO 55 bucket issues e/r back to SAF
04/28/2022 18:36:19	LOBO 31	DKA	e/r SAF hold
04/28/2022 18:47:38	LOBO 31	DKA	landing SAF
04/28/2022 18:54:14	AA 5AB	DKA	Released off the fire e/r to Flagstaff
04/28/2022 19:21:09	LOBO 55	DKA	remaining aircraft on the fire. I have about one hour of fuel and would like to FF with SFC
04/28/2022 19:41:39	LOBO 55	DKA	off the fire e/r to Santa Fe
04/28/2022 19:51:13	LOBO 55	DKA	Landing SAF
04/29/2022 08:22:23	AOBD	TGF	Requesting AA over the fire at 0900 and after if they could get with IC on the Freelove and check that out too // copy will relay to AA
04/29/2022 08:36:22	TGF	AA-8NA	Relayed request // he'll be heading up shortly
04/29/2022 09:34:08	Cerro AA	TGF	Requesting 2 T1 helos and are there any scoopers available and do we have permission to scoop out of Chochiti Lake // copy will go those ordered and will find out about approval for the lake
04/29/2022 09:34:31	TGF	3CH	Relayed request // copy well get them out there
04/29/2022 09:35:11	TGF	NG	Played request for 1 NG ship // copy
04/29/2022 09:37:01	TGF	ABC AC	Is there approval for Chochiti Lake for scoopers // let me find that out and get back with you
04/29/2022 09:38:38	TGF	AOBD Cox	AA form Cerro Pelado would like to know if the scoopers are available // they are
04/29/2022 09:39:11	Cerro AA	TGF	Would like to order a LP // copy that will call SWCC
04/29/2022 09:39:45	TGF	SWCC	AA from Cerro Pelado would like to order a LP sending the order now // copy that
04/29/2022 09:46:54	LOBO 31	TGF	OFF SAF > CERRO PELADO 4 SOB 2+30 FOB 0+20 ETE +COMMS
04/29/2022 09:56:49	Cerro AA	TGF	Requesting relief over the fore at 1200 // copy that
04/29/2022 09:57:24	TGF	SWCC	Relayed request // they'll get AA-4WA you can call ABC and let them know
04/29/2022 09:59:52	TGF	ABC AC	Requesting AA-4WA for relief over Cerro Pelado at 1200 // copy that also there is permission for the scoopers to use Chochiti lake they just need to keep track of dips and volume and report that back to Corps. of Eng. POC (b) (6), (b) (7)(C)
04/29/2022 10:00:53	TGF	Calf AA	Relayed approval for Chochiti Lake and to keep track of dips and volume
04/29/2022 10:53:18	Calf AA	TGF	Status of the scoopers // kneeboard sent was waiting on lake approval
04/29/2022 11:34:41	Cerro AA	TGF	Would like to place a hold on the scoppers // copy looks like they are already launched on AFF but I will see if I can stop them
04/29/2022 11:35:35	TGF	Ryan F	Per AA scoopers ahve been put on a hold is it possible to stop them from launching // they are already launch but will let them know // copy thank you
04/29/2022 11:36:02	TGF	Cerro AA	Scoopers are already launched // copy that
04/29/2022 11:37:11	Cerro AA	TGF	LOBO 31 enrt back to SAF

Entry Date/Time	From	To	Details
04/29/2022 11:40:38	LOBO 31	TGF	OFF CERRO PELADO > SAF 0+20 ETE +COMMS
04/29/2022 11:43:14	LOBO 18	TGF	OFF SAF > CERRO PELADO 4 SOB 2+30 FOB 0+20 ETE +COMMS
04/29/2022 11:50:49	LOBO 31	TGF	ONTG SAF
04/29/2022 16:39:01	CERRO LO	AG	NEW SMOKE COMING FROM THE ORIGIN OF THE FIRE// ITS MOVING WEST TO CERRO LAJARA
04/30/2022 08:56:57	ASGS	TGF	Requesting AA up over the fire // copy I'll get a hold of 8NA
04/30/2022 08:57:25	TGF	AA-8NA	Relayed request // copy we'll get headed that way
04/30/2022 09:54:38	Cerro AA	TGF	Requesting 1 T1 helo to DIV R // copy will get them your way
04/30/2022 09:56:30	TGF	3CH	Relayed request // copy that
04/30/2022 10:07:57	Cerro AA	TGF	Requesting one more T1 helo to the fire // copy that
04/30/2022 10:08:13	TGF	ANG	Relayed request
04/30/2022 10:35:03	LOBO 29	TGF	OFF SAF > CERRO 4 SOB 2+0 FOB 0+12 ETE +COMMS
04/30/2022 11:00:28	LOBO 29	TGF	FF w/ AA
04/30/2022 12:04:07	LOBO 55	TGF	OFF SAF > CERRO 4 SOB 2+30 FOB 0+17 +COMMS
04/30/2022 12:04:24	LOBO 29	TGF	OFF CERRO > SAF 0+17 ETE +COMMS
04/30/2022 12:12:11	LOBO 29	TGF	ONTG SAF
04/30/2022 15:30:50	LOBO 29	TGF	OFF CERRO > 4 SOB 0+17 ETE +COMMS
04/30/2022 16:41:36	LOBO 55	TGF	ONTG SAF
04/30/2022 16:52:54	LOBO 29	TGF	OFF SAF > CERRO 4 SOB 2+0 FOB 0+17 ETE +COMMS
04/30/2022 16:59:14	LOBO 29	TGF	FF local
04/30/2022 17:40:22	LOBO 55	TGF	OFF SAF > CERRO 4 SOB 1+30 FOB 0+14 ETE +COMMS
04/30/2022 17:46:27	LOBO 55	TGF	FF local
04/30/2022 18:05:56	Cerro AA	TGF	LOBO 55 has a brocken bucket and is heading back to SAF
04/30/2022 18:35:27	LOBO 55	DKA	Ianding SAF
04/30/2022 18:44:59	LOBO 29	TGF	OFF CERRO >SAF 0+17 ETE
05/01/2022 08:57:46	Cerro AA	TGF	Requesting one T1 helicopter // copy will get them sent your way
05/01/2022 08:58:07	TGF	3CH	Relayed request // copy
05/01/2022 11:06:58	Cerro AA	TGF	Requesting a second T1 to the fire // copy will call teh ANG
05/01/2022 11:07:23	TGF	ANG	Relayed request // we'll get them going that way
05/01/2022 11:07:52	LOBO 55	TGF	OFF SAF > CERRO 4 SOB 2+30 FOB 0+15 ETE +COMMS
05/01/2022 11:12:19	LOBO 55	TGF	FF w/ AA
05/01/2022 16:19:54	Cerro AA	TGF	Due to the winds all aircraft have been released from the fire

VOR	ATB	Helibase
29nm 286° SAF: SANTA FE V	44nm 350° ABQ: ALBUQUERQUE	8nm 132° FEN: FENTON HIL
44nm 001° ABQ: ALBUQUERQUE	71nm 265° LVS: LAS VEGAS	8nm 134° FEN: FENTON HIL
45nm 001° ABQ: ALBUQUERQUE	100nm 134° DRO: DURANGO	13nm 246° TA49: TA-49 HEL
47nm 351° ILT: ISLETA NDB	170nm 313° ROW: ROSWELL AT	17nm 238° LAM: LOS ALAMOS
53nm 310° OTO: OTTO VOR	179nm 339° ALM: ALAMOGORDO	43nm 336° SAND: SANDIA HE

WildCAD Incident Card - Santa Fe Interagency Dispatch Center: SNF 2022-17
"Pino West Piles Rx" Prescribed Fire 01/19/2022 08:02:51 Order Number: NM-SNF-000017
Area 18 (JEMEZ)

Reporting Party: BAT 10-3**Initial Report On Conditions:**

Jemez RD plans to begin burning Pino West logging slash piles 300 ac

Initial Location: FR 10 and FR 269 San Juan Mesa

Lat: 35°,47',4.09", Lon: 106°,36',19.08", T18N, R3E, NWNE Sec 22

Actual Location:

Lat: 35°,47',4.09", Lon: 106°,36',19.08"

Incident Notes:

Owner: USFS

Dispatcher: (b) (6), (b) (7)(C) **Status:** Open

Fiscal Codes: WFSE1022 (0319)**Web Comment:****Resource Details:****DIV 10-3:**

Committed at 01/20/2022 09:22:01, Released at 01/20/2022 15:35:59, Committed at 02/19/2022 08:54:12, Released at 02/19/2022 13:25:23

BAT 10-3:

Committed at 01/19/2022 09:39:55, On Scene at 01/19/2022 10:31:41, Returning at 01/19/2022 15:54:46, Released at 01/19/2022 16:12:17, Committed at 01/20/2022 09:22:29, Returning at 01/20/2022 15:41:08, Released at 01/20/2022 16:19:42, Committed at 01/21/2022 09:44:05, Released at 01/21/2022 12:02:41, Committed at 02/01/2022 08:54:27, On Scene at 02/01/2022 10:30:11, Returning at 02/01/2022 11:35:26, Released at 02/01/2022 13:00:41, Committed at 02/10/2022 10:13:38, On Scene at 02/10/2022 12:02:23, Released at 02/10/2022 14:44:53, Committed at 02/19/2022 08:54:06, Released at 02/19/2022 13:29:47

CAPT 631:

Committed at 01/19/2022 09:32:27, On Scene at 01/19/2022 10:31:41, Returning at 01/19/2022 14:40:30, Released at 01/19/2022 15:54:35

PAT 10-3:

Committed at 01/20/2022 09:22:29, Returning at 01/20/2022 15:41:08, Released at 01/20/2022 16:19:42, Committed at 01/21/2022 09:44:05, Released at 01/21/2022 12:02:41, Committed at 02/19/2022 08:54:06, Released at 02/19/2022 13:29:47

Entry Date/Time	From	To	Details
01/19/2022 09:32:41	CAPT 631	TGF	Enrt
01/19/2022 09:39:48	BAT 10-3	TGF	Enrt w/ PAT 10-3
01/19/2022 10:31:09	RXBB	TGF	Test fire successful continuing with ignitions
01/19/2022 10:31:21	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful continuing with ignitions Sent to: Jemez District group
01/19/2022 12:26:26	RXBB	TGF	Completed ignitions for the day // do you have ac // will get back with you
01/19/2022 12:26:37	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day Sent to: Jemez District group
01/20/2022 10:37:27	RXBB	AJL	Initiating test fire.
01/20/2022 10:48:29	RXBB	AJL	Test fire successful, continuing with ignitions.. With vent being what it is, will light a handful of piles, shouldn't take too long.
01/20/2022 10:50:35	AJL	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful. Continuing with ignitions. Sent to: Jemez District group

Entry Date/Time	From	To	Details
01/20/2022 12:01:29	RXBB	AJL	Completed ignitions for the day.
01/20/2022 12:02:01	AJL	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day. Sent to: Jemez District group
01/21/2022 09:44:30	BAT 10-3	AJL	ER w/Pat 10-3
01/21/2022 12:02:28	PAT 10-3	AJL	No issues no concerns, smoldering with minimal smoke / back at station
01/21/2022 13:27:19	AJL		Acres set to 100
02/01/2022 08:54:45	BAT 10-3	TGF	Enrt w/ PAT 10-3 and 3-31
02/01/2022 10:12:13	BAP 10-3	TGF	On scene and briefed up starting test fire
02/01/2022 10:29:48	RXBB	TGF	Test fire successful continuing with ignitions ventilations are poor so not going to burn for too long
02/01/2022 10:30:05	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful continuing with ignitions Sent to: Jemez District group
02/01/2022 11:36:00	RXBB	TGF	Completed ignitions for the day of 50 ac
02/01/2022 11:36:14	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day of 50 ac Sent to: Jemez District group
02/10/2022 10:13:11	BAT 10-3	TGF	Enrt
02/10/2022 11:37:21	BAT 10-3	TGF	On scene all resources briefed starting the test fire
02/10/2022 11:38:38	RXBB	TGF	Test fire successful continuing with ignitions
02/10/2022 11:38:55	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful continuing with ignitions Sent to: Jemez District group
02/10/2022 12:38:30	RXBB	TGF	Completed ignitions for the day of 50 ac
02/10/2022 12:39:11	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day of 50 ac Sent to: Jemez District group
02/19/2022 08:53:27	BAT 10-3	TGF	Enrt w/ PAT 10-3
02/19/2022 08:53:40	DIV 10-3	TGF	Enrt
02/19/2022 09:47:13	RXBB	TGF	Starting test fire
02/19/2022 11:13:58	RXBB	TGF	Completed ignitions of the whole burn unit for 709 acs will stick around for a little longer
02/19/2022 11:14:59	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the whole Pino West Rx today for a total of 709 ac Sent to: Jemez District group
02/19/2022 11:15:07	TGF		Acres set to 709

VOR	ATB	Helibase
30nm 286° SAF: SANTA FE V	44nm 348° ABQ: ALBUQUERQU	7nm 136° FEN: FENTON HIL
45nm 000° ABQ: ALBUQUERQU	72nm 265° LVS: LAS VEGAS	7nm 138° FEN: FENTON HIL
46nm 000° ABQ: ALBUQUERQU	99nm 134° DRO: DURANGO	14nm 250° TA49: TA-49 HEL
48nm 350° ILT: ISLETA NDB	171nm 313° ROW: ROSWELL AT	17nm 241° LAM: LOS ALAMOS
54nm 310° OTO: OTTO VOR	179nm 339° ALM: ALAMOGORDO	44nm 334° SAND: SANDIA HE

Initial Report On Conditions

Fuels: Acres: W Speed: Dir: Slope: Aspect:

Spread: Complexity: Jurisdiction:

Structures:

Initial Strategy: N/A

Fire Report Information

Fire #: SubUnit: SubUnit #:

Acres: 709 Size Class: E Elevation: Land Status:

Contain: Control: Out:

Statistical Cause: Specific Cause:

EXHIBIT #: 2

TITLE: Wildland Fire Origin and Cause Supplemental Incident Report

CASE NUMBER: 23-03-IAIP004

 USDA Forest Service	Wildland Fire Origin and Cause Supplemental Incident Report <small>(Reference FSH 5309.11, Chapter 20)</small>						Incident Number	IAIP004			
							Incident Date	04/22/2022			
LOCATION											
Fire Name	Dispatch #	Account Code	Region	Forest	District	State	County				
Cerro Pelado	SNF-2022-49	P3PK47	03	10	3	NM	43				
Origin Location: geographical landmarks, highways, roads, trails, etc.	Township	Range	Section	1/4 Sec	Meridian/Datum						
National Forest System Road 10E1	T18N	R3E	SESE	SEC 23	WGS 84						
	Latitude (D - M' - S")		Longitude (D - M' - S")								
	35°	46'	25"	106°	35'	55"					
JURISDICTION											
USFS Only	Identify Other Agency(s)			Lead Origin & Cause Investigator			Est. Suppression Cost	Injuries/Deaths			
Santa Fe NF				SA (b) (6), (b) (7)(C)			To Be Determined	0			
EVENT SEQUENCE											
Estimated Time of Ignition		Time Fire Reported			Time Origin Protected			Time Origin Released			
Mo.	Day	Year	HHMM	Mo.	Day	Year	HHMM	Mo.	Day	Year	HHMM
			04	22	2022	15:39	04	28	2022	1400	
Who	Who	(b) (6), (b) (7)(C)	(Lookout)	Who	(b) (6), (b) (7)(C)	WA INVF	Who	(b) (6), (b) (7)(C)	WA INVF		
FIRE BEHAVIOR											
Estimated Acres	Fuel Type @ Ignition Area Material First Ignited			Weather Observer (On Scene)		Date	Time	Temp	RH	Wind Dir	Wind Speed
45605 To Date	Logging Slash/Litter/Light Grass			N/A							
Slope %	Aspect: N E S W		Elevation	Weather Station		Date	Time	Temp	RH	Wind Dir	Wind Speed
0-5	N		8400	Jemez Weather Station		4/22/22	1500	70	9	215°	28mph
CAUSE DETERMINATION CODE: (PS) = POSSIBLE, (PR) = PROBABLE, (EX) = EXCLUDED (EXPLAIN IN NARRATIVE)											
EX Lightning	(Detection Method)										
Commercial lightning detection services detected no cloud to ground lightning strikes in the surrounding 5 mile area, 14 days prior to the ignition of the wildfire. No scarring on trees or snags, blow-holes at base of trees, fulgurites, or other evidence of lightning strikes observed in general origin area.											
EX Equipment Use	(Exhaust, Brake Shoe, Mechanical, Friction, Aircraft, Vehicle Fire, Other)										
No evidence of recent mechanized equipment use observed or reported in general origin area at the time of ignition.											
EX Smoking	(Tobacco, Other)										
Environmental factors and parameters were present supporting the probability of ignition as possible. No evidence of smoking was observed in general origin area or specific origin area.											
EX Campfire	(Cooking, Warming, Ceremonial, Other)										
No evidence of a campfire was observed in the general and or specific origin area.											
PR Debris Burning	(Land, Slash, Refuse, Other)										
USFS Fire personnel ignited several logging slash/litter piles months prior during Pino West RX. Remains of a logging slash pile located at the specific origin area. Smoke was observed rising from under ash crust on the outer edge of the pile was documented at the time of the investigation. (48 days after the fire was reported)											
EX Railroad	(Ignition Activities Associated with Railroad Companies)										
No railroad or rail lines located in the general origin area.											
EX Incendiary	(Ignition Component / Material First Ignited)										
No evidence of incendiary device was found during the investigation. No validated arson fire activity in this area.											
EX Children	(Ignition Activities Associated with Children; 12- years and younger)										
No evidence of fire play in the general origin area. No report of children observed in or near the general origin area.											
EX Miscellaneous	(Blasting, Structure, Fireworks, Welding, Cutting, Grinding, Pest Control, Power Line, Glass, Target Shooting, Spontaneous Combustion, Other)										
No evidence of other miscellaneous causes identified or observed.											
Cause Determined: State brief reason & explain in the narrative				Cause Undetermined: State brief reason & explain in the narrative							
Debris Burning. High wind event exposed embers from hold over fire within slash pile/s. Windblown embers ignited receptive fuels down wind and upslope.				N/A							
PREPARED BY		SA Travis Lunders #382		Date	Submitted to				Date		
ATTACHMENTS - IF INCLUDED		LE Incident Report	<input checked="" type="checkbox"/>	Supplemental Reports	<input type="checkbox"/>	Interviews	<input checked="" type="checkbox"/>	Statements	<input type="checkbox"/>		
		Fire Stat Report	<input checked="" type="checkbox"/>	Sketches / Diagrams	<input checked="" type="checkbox"/>	Maps	<input checked="" type="checkbox"/>	Photographs	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>

 USDA Forest Service	Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)				Incident Number	IAP004	
					Incident Date	04/22/2022	
(CODE: S – SUBJECT, W – WITNESS, V – VICTIM, RP – REPORTING PARTY, O – OTHER)							
Name (Last, First, Middle)			Alias		DOB	Race	Gender
V	(b) (6), (b) (7)(C) - (b) (6), (b) (7)(C) President						
Address (Home)			Phone (Home)		Hair Color	Eye Color	SSN
(b) (6), (b) (7)(C)							
Address (Business) (Tax Identification Number if Required)			Phone (Work)		Height	Weight	License / ID
TC Company TIN: 58-5723201			505-753-4741				
Name (Last, First, Middle)			Alias		DOB	Race	Gender
RP	(b) (6), (b) (7)(C)				(b) (6), (b) (7)(C)	(b) (6), (b) (7)(C)	(b) (6), (b) (7)(C)
Address (Home)			Phone (Home)		Hair Color	Eye Color	SSN
(b) (6), (b) (7)(C)			(b) (6), (b) (7)(C)				(b) (6), (b) (7)(C)
Address (Business) (Tax Identification Number if Required)			Phone (Work)		Height	Weight	License / ID
Name (Last, First, Middle)			Alias		DOB	Race	Gender
Address (Home)			Phone (Home)		Hair Color	Eye Color	SSN
Address (Business) (Tax Identification Number if Required)			Phone (Work)		Height	Weight	License / ID
VEHICLE INFORMATION (CODE: D – DAMAGED, E – EVIDENCE, I – IMPOUND, S – SUBJECT W – WITNESS, O – OTHER)							
D	License Number	State	VIN	Year	Make	Style	Other Information
				1988	Mack	688	Mack Truck, 1995 Prentice 210D Log Loader
D	License Number	State	VIN	Year	Make	Style	Other Information
				2006	Pren		Prentice 490 Dual Arch Grapple Skidder
	License Number	State	VIN	Year	Make	Style	Other Information
	License Number	State	VIN	Year	Make	Style	Other Information
INSURANCE INFORMATION (HOME, AUTO, LIABILITY, OTHER)							
Insurance Company		Policy Number	Insurance Agent	Address		Phone Number	

 USDA Forest Service	Wildland Fire Origin and Cause Supplemental Incident Report <small>(Reference FSH 5309.11, Chapter 20)</small>		Incident Number	IAIP004
			Incident Date	04/22/2022
SYNOPSIS (DATE, FIRE NAME, ESTIMATED ACRES, LOCATION, JURISDICTION); (ESTIMATED COST, DAMAGE; PROPERTY / RESOURCE); (CAUSE; DETERMINED / UNDETERMINED)				
<p>The Cerro Pelado Wildfire was reported on 04/22/2022, at approximately 15:39 hours by the Cerro Pelado Fire Lookout. The fire origin is in Sandoval County, New Mexico; on the Jemez Ranger District, within the Santa Fe National Forest. The fire burnt approximately 45,605 acres. Estimated costs of suppression and damage are to be totaled by ASC.</p> <p>United States Forest Service (USFS) Special Agent (SA) (b) (6), (b) (7)(C) determined the Cerro Pelado Wildfire classified as Human; Debris Burning/Holdover Fire as the most probable cause of ignition</p>				
DETAILS OF INVESTIGATION: (INITIAL REPORT, INITIAL ATTACK, INITIAL INVESTIGATION, FIRE BEHAVIOR ANALYSIS, STATEMENTS, ORIGIN EXAMINATION, CAUSE DETERMINATION)				

INITIAL REPORT

On April 22, 2022, at approximately 15:39 hours United States Forest Service (USFS) Fire Lookout (b) (6), (b) (7)(C) who was present in the Cerro Pelado Lookout Tower, reported a rapidly growing wildfire approximately 2 miles west of the tower at an azimuth of 255°. (b) (6), (b) (7)(C) reported the fire's initial location was north of Forest Service Road (FSR) 270 and south of FS 10.

INITIAL ATTACK

Arriving fire personnel reportedly did not immediately engage in initial attack operations due to the extremely high winds, and extreme fire behavior. Their efforts transitioned to notification and evacuation of residences in the surrounding areas.

INITIAL INVESTIGATION

USFS Special Agents (SA) (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) arrived in White Rock, NM on June 4th, 2022. Both began reviewing maps of the area as well as the WildCAD for the Cerro Pelado Wildfire. (*Exhibit 1 Cerro Pelado WildCAD*) Additionally they analyzed weather conditions and lightning data for the surrounding areas.

Probable Weather Conditions at Cerro Pelado Origin Area

SA (b) (6), (b) (7)(C) obtained estimated weather conditions from two surrounding RAWS (Remote Automated Weather Stations). The following is not the exact weather readings at the specific origin area at the exact time of ignition; they do provide data that was used to estimate a range of probable weather and environmental conditions.

The data taken from the Tower NM RAWS (located approximately 18.6 miles east of the fire at 6500 feet in elevation), at 1500 hours reflected the following conditions (*Exhibit 2 Tower NM RAWS Weather*):

- Temperature: 79° Fahrenheit
- Relative Humidity: 7%
- Wind Direction: 218°
- Wind Speed: 33.0 mph, Gusting to 58 mph

The data taken from the Jemez NM RAWS (located approximately 4.75 miles north of the fire at 7999 feet in elevation), at 1500 hours reflected the following conditions (*Exhibit 2 Jemez NM RAWS Weather*):

- Temperature: 70° Fahrenheit
- Relative Humidity: 9%
- Wind Direction: 215°
- Wind Speed: 9.0 mph, Gusting to 28.0 mph

Lightning Data Report

SA (b) (6), (b) (7)(C) ran a report through earthnetworks.com, a private company that is contracted to provide lightning detection reports. SA (b) (6), (b) (7)(C) ran a report dating back 14 days from the start of the fire. The report provided verified zero cloud-to-ground lightning strokes within a five-mile radius of the reported general origin area. (*Exhibit 3 Lightning Report*)

Initial Sight Visit

On June 5th, 2022, SA (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) arrived at the intersection of FS 270 and FS 10DD. Initial responding fire personnel reported first arriving on scene at this location the day the fire was reported. SA (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) began observing fire behavior indicators in this area. Both noted fire pattern vectors that indicated the fire advanced predominantly from the west to the east through this area with significant intensity. The trees on and near the ridge line immediately to the north of this intersection were subject to torching. All displayed signs of significant foliage freeze

near the tops of the canopy. The area had recently been mechanically logged and thinned. In the areas impacted by the logging activities the fuels on the forest floor were almost completely consumed by rapidly advancing fire. Both (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) agreed they would need to speak to the reporting party, and initial responding fire fighters to identify the fires initial location as well as areas that were subject to back burns and other suppression efforts.

Both traveled north on FS 10DD and noted that several decks of recently fell and processed logs had been consumed by the advancing fire. The investigators noted that typically green decked logs would not be entirely consumed by advancing fire. Both contributed this due the extremely dry conditions the area had been subjected to. While traveling on FS 10DC the investigators discovered a Mack straight truck equipped with a Prentice log loader that had been consumed/destroyed in the advancing fire. The truck and log loader were parked down wind and adjacent to what appeared to be a large log deck.



(b) (6), (b) (7)(C), Cerro Pelado Lookout and Reporting Party Interview

SA (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) interviewed (b) (6), (b) (7)(C) at the Cerro Pelado Lookout on June 5th at approximately 10:35 A.M. During the interview (b) (6), (b) (7)(C) stated his first day in the tower for the 2022 season was on April 18th. He explained that he and other fire personnel had to remove snow from FS 270 to get up to the tower. On the day the fire was reported (b) (6), (b) (7)(C) noted at 1300 hours the wind was out of the southwest switching to the northwest. He estimated the wind at that time was sustained 30 miles per hour (mph), gusting 50 mph plus. He first noticed white to light blue smoke rising from an area north of FS 270 near FS 10DD and FS 10DC at approximately 1539 hours. (b) (6), (b) (7)(C) explained that he was very familiar with FS 10DD and FS 10DC which is a cut across from County Road 10 to FS 270 as he frequently used during the 2021 season. (b) (6), (b) (7)(C) confirmed the fires location was at a 255° azimuth from the tower, and estimated it to be two miles away. SA (b) (6), (b) (7)(C) took a photograph of the Cerro Pelado Lookout Incident Report filled out by Wesselink on April 4th, 2022, at 1539 hours. ([Exhibit 4 Cerro Pelado Lookout Incident Report](#)) (b) (6), (b) (7)(C) provided SA (b) (6), (b) (7)(C) with 3 photographs taken at 1554 hrs, 1627 hrs, 1640 hrs, and a video depict the fires initial location and its

growth and progression over the next hour. (***Exhibit Lookout 5 Cerro Pelado Fire Lookout Tower Photo Exhibit***)

DAFMO (b) (6), (b) (7)(C)

SA (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) traveled to incident command located in Jemez Springs, there they spoke with District Assistant Fire Management Officer (AFMO) (b) (6), (b) (7)(C). (b) (6), (b) (7)(C) questioned why SA (b) (6), (b) (7)(C) was conducting an Origin and Cause investigation on the Cerro Pelado Fire as it had already by investigated by (b) (6), (b) (7)(C) and stated it was determined not to be the piles. SA (b) (6), (b) (7)(C) explained he had been requested to conduct an O&C independent of the previous investigator. (b) (6), (b) (7)(C) explain that he was not first on scene, and in fact arrived several hours after it had been reported. He advised that District Fire Management Officer (FMO) (b) (6), (b) (7)(C) would have more information regarding the fires initial location and behavior. (b) (6), (b) (7)(C) agreed to send SA (b) (6), (b) (7)(C) a copy of his initial statement and map of the area showing the fires progression. SA (b) (6), (b) (7)(C) received an email from DAFMO (b) (6), (b) (7)(C) at 1:26 P.M. on June 5th, 2022. (***Exhibit 6 DAFMO Statement and Map***)

(b) (6), (b) (7)(C) Interview

While waiting for FMO (b) (6), (b) (7)(C) to arrive at the intersection of FSR 270 and FS 10DD on the morning of June 6th SA (b) (6), (b) (7)(C) met (b) (6), (b) (7)(C) (Owner of TC Company who held the stewardship contract in this area) along FSR 270. The conversation was recorded on SA (b) (6), (b) (7)(C) Body Worn Camera (BWC). (***Exhibit 7 (b) (6), (b) (7)(C) Interview***) The following is a summary of that conversation.

(b) (6), (b) (7)(C) explained that he is the owner of the logging company, however (b) (6), (b) (7)(C) is the president of the company and for the most part runs the day-to-day operations. (b) (6), (b) (7)(C) states that he believed the fire started near a mechanical slash pile west of where they were speaking. He expressed his frustration that Forest Service employees reportedly made them leave what he described as a 10-acre stringer of dog hair thicket right next to the pile where he believed the fire started. He went on to say he was hired to thin this forest so things like this did not happen. He explained he was required to leave another 20-acre area on the other side of the draw that was not thinned which he believed contributed to the fire.

(b) (6), (b) (7)(C) spoke to the fact that the logs in this area were cut from January to March. He describes it as a "phenomenon" that they burnt and were consumed in the fire. He described the deck next to the loader that was burnt in the fire as being 25 feet high and 150 feet long. He explains that he also lost a rubber-tired skidder in the fire. When asked about his feller buncher and processor he explained he had already moved them to another unit/task order and stated all they were doing was hauling out of this unit.



(b) (6), (b) (7)(C) explained where he believed the fire started and how to access that area. He further states that (b) (6), (b) (7)(C) had gone the origin area with the fire investigator. The day that (b) (6), (b) (7)(C) and the fire investigator went to the pile it was still burning. He believed this was approximately two weeks after the fire had started.

(b) (6), (b) (7)(C) believe the piles in the area he suspected was the origin of the fire were burnt in February. He explains that they were able to access that area because they (TC Company) had plowed the road open. He also speaks to the fact that the fire fighters who burnt the piles near the suspect origin had gotten stuck due to the amount of snow in that area. He estimated they had two to three feet of snow on the level during the winter months. He confirmed his logging crew were running chains on their rubber-tired equipment and had welded ice cleats to the metal tracked equipment.

(b) (6), (b) (7)(C) stated he stood his crews down because the winds were forecast to be 40-60 mph. He said he allowed his truck driver to haul one load out the morning the fire started. (b) (6), (b) (7)(C) explained that (b) (6), (b) (7)(C) with the USFS in the Santa Fe office would have access to all load tickets and would be able to confirm they only haul one load from this unit on the day in question.

FMO (b) (6), (b) (7)(C) Interview

Following the meeting with (b) (6), (b) (7)(C), SA (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) spoke with FMO (b) (6), (b) (7)(C). (b) (6), (b) (7)(C) agreed to allow the interview to be recorded on SA (b) (6), (b) (7)(C) BWC. The following is a summary of that interview. **(Exhibit 8)**
Interview (b) (6), (b) (7)(C) explained that the National Park Service engine was first on scene and arrived 5 minutes before his arrival. His engine arrived approximately 5 to 10 minutes after he arrived.

While standing near the intersection of FSR 270 and FS 10DD (b) (6), (b) (1) stated he could see light drift on the ridge line to the west. The main column had moved from the west to the east, (b) (6), (b) (1) was indicating that fire was all on top and was north, northwest of the intersection. (b) (6), (b) (1) estimated that after being on scene for an hour the fire began to approach FS 10DD, approximately 300 yards from the intersection. He clarified they did not take any onsite weather. Once they realized where the fire was going their initial action was to assist law enforcement with evacuations.

(b) (6), (b) (1) explained he departed the area of the intersection to get the lookout out of the Cerro Pelado Lookout tower. (b) (6), (b) (1) confirmed that (b) (6), (b) (7)(C)'s first day in the lookout tower was probably 5 days prior to the fire starting. He also confirmed the fire crew was digging out snowdrifts on FSR 270 for a couple of days in order to get him up to the tower.

He recalled speaking with timber staff after the forest went into restrictions and stated that (b) (6), (b) (7)' and his crew definitely halted logging operations probably the day before the fire. (b) (6), (b) (1) believed they were in stage 2 restrictions, and they would have had to get a waiver to haul in the mornings. (b) (6), (b) (1) explained that there was no logging personnel in the area when he arrived. He did confirm there was a log loader parked near the intersection, and indicated there was another log loader and a skidder to the east.

(b) (6), (b) (1) explained that the fire eventually burned downslope toward FSR 270. Fire did not put any backburn fire down on the ground in this area. He explained they did put a little fire down farther west on FSR 270 and FS 10. He states that all the log decks along FSR 270 were green and been cut early that winter. (b) (6), (b) (1) also stated he could not believe how clean the decks brunt because they were "green, green." As the group was walking west on FSR 270 (b) (6), (b) (1) comments he could not see flames on the ridge as he was driving in. All he was seeing was the smoke on the ridge. He described the area on top as being all open as it had just been treated. He indicated the head fire had already progressed past this point after it lined up with the wind.

(b) (6), (b) (1) confirmed he and his crews burnt piles down in a bowl on the north side of the ridge line. He agreed to have (b) (6), (b) (1) the AFMO identify the pile locations that were burnt over the winter months as he was the burn boss for the RX.

(b) (6), (b) (1) recalled seeing a white Chevy Colorado extended cab with a small atv type trailer with the ramp down parked on the southside of FSR 270. He later estimated it was likely a 2019 model. By the time they returned to take pictures of it, it was gone. He and no others to his knowledge were able to get a license plate number from the vehicle. He confirmed turkey season was open at the time of the fire, and it is common to have some turkey hunters in the area that time of year.

He explained they had a good winter with plenty of moisture (snow), all the way up until the end of March. Then in April the storms just shut off. (b) (6), (b) (1) estimated that 13 out of the 16 days prior to the fire starting were red flag days with wind and low RH. Stating the snow came off fast. He explained that the forest gates were open on the 15th or 16th approximately a week before the start.

(b) (6), (b) (1) walked the investigators to the furthest west location he saw smoke drift on the ridge and stated with the way the wind was blowing there is no way it backed into the wind very far. He indicates with his hand that the main column was further to the east and remember thinking to himself how is it moving so fast across this treatment unit. (b) (6), (b) (1) agreed to escort both investigators up on top into the treatment area.

He mentions there were 5 human caused fires 3 days prior to the Cerro Pelado Fire starting. He believed they were the result of carelessness and not blatant stuff. He did not know if they were actually determined human caused but qualified there was no campfire rings and says it would be good to get some insight from (b) (6), (b) (7) referring to USFS Law Enforcement Officer (b) (6), (b) (7)(C). The group discussed the fire which occurred three days prior to the Cerro Pelado Fire on the San Juan Mesa across (west) FS 10. (b) (6), (b) (1) explains that with everything that was coming out with Calf Canyon and it likely being started by escaped burn piles, (b) (6), (b) (1) instructed his Engine folks on E 431 to check all of their landing piles that were light last winter. He said they were out all-day checking piles on a UTV on the 20th of April. (b) (6), (b) (1) explains the San Juan Mesa fire was not in a pile but next to a pile. He states it wasn't near a berm where the piles hold the heat. He confirmed it was "next" to a pile that had been burnt by his crew that winter. In his opinion there was nothing there that would of held heat for 3 months.

SA (b) (6), (b) (7)(C) asked how they burn piles in the winter months. Specifically asking if they used equipment to push the piles. He stated that they do not have the equipment on the district to push the berms, "so we just check them." (b) (6), (b) (7)(C) said that (b) (6), (b) (7)(C) may have a log, and or was hopeful dispatch has a log of the days they checked the piles after they ignited them. He qualifies that with everything going on he was paranoid. He estimated the unit with the treatment piles that were light last winter was 600 acres. He confirmed they light piles in January and February and he believes the last day they light piles was the 19th of February. SA (b) (6), (b) (7)(C) asked if they ever use snowmobiles "sleds" to check piles. (b) (6), (b) (7)(C) explained they haven't used sleds to check or light piles since he has been on the district.

SA (b) (6), (b) (7)(C) ended the recording and agreed to start it again once they arrived on top of the ridge within the treatment unit.

Once on top in the treatment unit (b) (6), (b) (7)(C) states that no one got into the unit on the initial day. (b) (6), (b) (7)(C) believed the fire started up on top near the groups current location based on the smoke he observed when arriving on scene the day the fire was reported. He estimates suppression efforts began in this area around day two. (b) (6), (b) (7)(C) describes how they dug handline from FS 10 and tied it into the road they were parked on, and then dropping down slope to the south and tying into FSR 270.

(b) (6), (b) (7)(C) indicated while point down into a bowl to the east, northeast describing that is where they light the piles this winter. (b) (6), (b) (7)(C) explained there was so much snow in this area last winter that the crew had to hike into this area to light the piles because they could not get a UTV into the unit.

SA (b) (6), (b) (7)(C) informed (b) (6), (b) (7)(C) that AFMO (b) (6), (b) (7)(C) had his business card with his email, and state he could email him a map of the area where they burnt piles last winter, as well as a burn plan for the RX. (b) (6), (b) (7)(C) states 95% of what they burnt this year was on the other side of NF 10; point in the direction of San Juan Mesa.

GENERAL ORIGIN AREA EXAMINATION

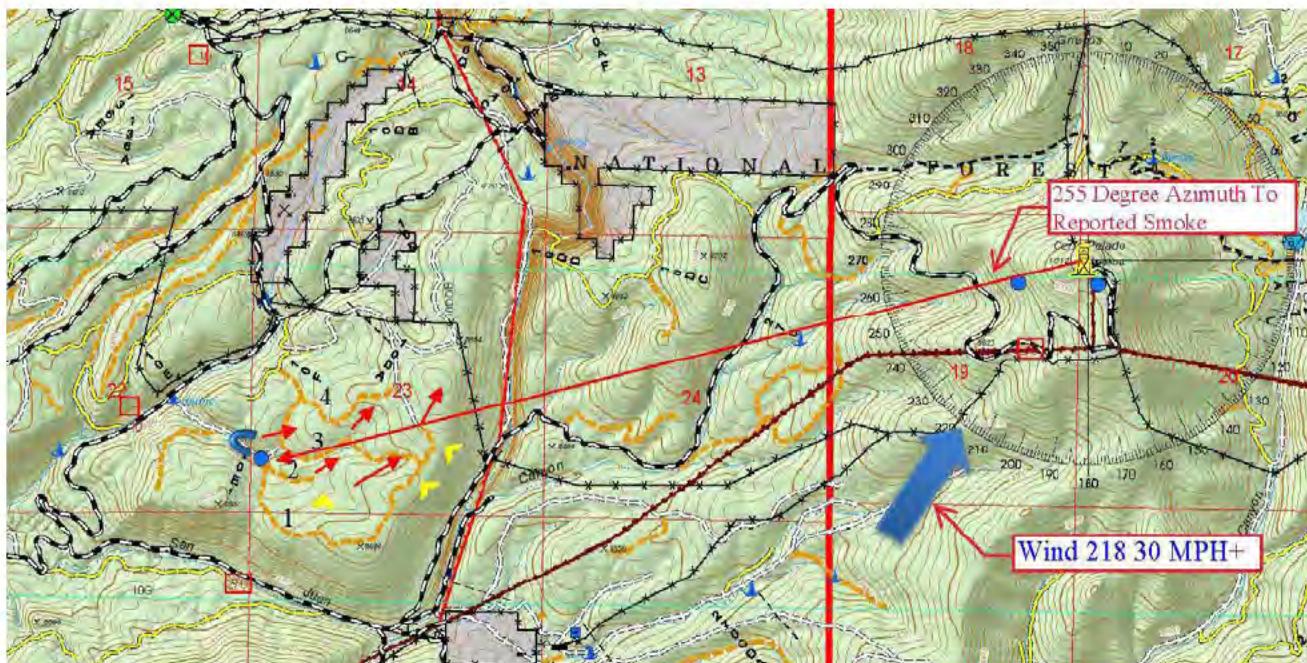
SA (b) (6), (b) (7)(C) began walking in a northeasterly direction along the ridge line that paralleled FS 270 to the south, and the bowl to the north where FMO (b) (6), (b) (7)(C) indicated the piles were burnt within the RX. (See Map on Page 10) An unclassified road/trail traversed the top of the ridge line, identified as 1 on the image below. Near the intersections of Trail 1 and a second unclassified trail identified as Trail 2 which runs east up a small drainage starting at the end of FS10E1, SA (b) (6), (b) (7)(C) began to observe intensifying advancing fire indicators on the north side of Trail 2. The degree of fuels consumption immediately adjacent to Trail 2 and 1 was significant. Approximately 20 to 30 meters south of the Trail 1 the fuels consumption began to diminish. SA (b) (6), (b) (7)(C) noted fire vectors in this area were consistent with high intensity flanking fire, consistent with the winds that were reported on the day of the fire. The degree and depth of char on the west facing sides of the remaining stumps in this area were also consistent with those observed in rapidly advancing wind driven flame fronts. Prominent foliage freeze was observed on the branches as well as on the needles which remained on the ponderosa pines along the ridge line. Nearing the intersection of Trail 3 that traversed west to east up a second small drainage SA (b) (6), (b) (7)(C) began walking in a "Z" pattern back to the west along a slight ridge line between the second and third unclassified roads. Surface fuels primarily composed of masticated wood chips, light grasses, and small brush were almost entirely consumed in this area. This area had been cleared of most of the standing merchantable timber, thereby increasing the air flow and speed of the winds in this area. The extreme wind driven advancing fire left only surface soils exposed in many places on the leeward side of the slope and ridgeline. A narrow stand of untreated mix of ponderosa pine and aspen along the east side of slight slope paralleling Trail 3 exhibited macro fire burn indicators such as foliage freeze, cupping, and depth of char indicating the advancing fire came predominately from the west.

SA (b) (6), (b) (7)(C) located several mechanical logging slash piles that had been previously burned along Trail 2 and 3. SA (b) (6), (b) (7)(C) observed advancing fire burn indicators from several off the piles, particularly those along the north side of Trail 2. SA (b) (6), (b) (7)(C) was unable to determine if the advancing fire occurred independently from each of the burn piles on the day the Cerro Pelado fire was reported or if advancing fire from a single ignition source further to the west-northwest burnt into each of the downwind and upslope piles thereby reigniting remaining fuels in the piles. He continued to follow macro fire vectors between Trail 2 and 3 back to an area just south of FS 10E1.

SA (b) (6), (b) (7)(C) requested SA (b) (6), (b) (7)(C) to survey the area he had identified. SA (b) (6), (b) (7)(C) independently walked a similar route and agreed with SA (b) (6), (b) (7)(C) observations. Both investigators relocated their vehicles to an area near the end of FS 10E1, the start of Trail 1 and 2, and a small dugout water pond west of the intersection. There the investigators observed a small

deck of unburned processed ponderosa pine logs and the remains of a burned mechanical logging slash pile. Investigators observed the remains of numerous partially consumed larger diameter processed log ends, white ash near the center of the pile, and an ash berm near the southwest side of the pile. Smoke as observed rising from the ash berm, and heat was felt radiating from this location. SA (b) (6), (b) (7)(C) estimated the ash berm was 5-6 feet wide, 20 feet long, and several feet deep.

The pile was constructed and burnt immediately adjacent to a slope of an untreated stand of timber, predominately consisting of small and larger diameter ponderosa pine. (Investigators Note: This is the same narrow untreated stand of timber that paralleled Trail 3 and was observed by both SA (b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) during their general origin examination.) Unburnt logging slash, remains of masticated wood material, light grasses, and larger diameter processed logs were observed along the southwest, west, and northwest side of the burnt pile. Investigators identified this area as the probable heel of the initial fires run. While standing on the west side of the burn pile, looking upslope, the investigators noted ponderosa pines to the left of the pile, starting at the base of the slope and progressing upwards still bore green needles. Ponderosa pines immediately upslope and southeast of the burn pile where heavily charred and void of almost all needles approximately $\frac{3}{4}$ of the way up the stem. The remaining needles had turned brown from exposure to high temperatures. A narrow area of transition existed slightly upslope of the burn pile and left of Trail 2. ([Exhibit 9 Initial Video of Probable Origin](#))



SA (b) (6), (b) (7)(C) began following advancing fire indicators from the probable origin area while SA (b) (6), (b) (7)(C) drove to the Cerro Pelado Lookout Tower. Once there SA (b) (6), (b) (7)(C) was able to locate SA (b) (6), (b) (7)(C) who was wearing a green traffic vest and was standing on his pickup box via a spotting scope. SA (b) (6), (b) (7)(C) had parked his truck near the center of the head of the fire as it intersected Trail 1 and FS 10DA. SA (b) (6), (b) (7)(C) confirmed SA (b) (6), (b) (7)(C) location was consistent with Fire Lookout (b) (6), (b) (7)(C) observations and photographs taken on April 22nd. SA (b) (6), (b) (7)(C) took several photographs from the tower depicting SA (b) (6), (b) (7)(C) location in relation to the initial smoke observation at a heading of 255° taken by (b) (6), (b) (7)(C). ([Exhibit 5 Cerro Pelado Fire Lookout Tower Photo Exhibit](#))

Interview of Engine Captain, (USFS Engine 431) (b) (6), (b) (7)(C)

SA (b) (6), (b) (7)(C) met USFS Engine Captain (b) (6), (b) (7)(C) at the Jemez District Office on the morning of June 7th, 2022. During the interview (b) (6), (b) (7)(C) confirmed he was on duty the day the Cerro Pelado Fire started. He recalled they had several "red flag days" prior to April 22nd. He explained the forest had gone into burn restriction that morning, and subsequently he and his crew were hanging signs at access points onto the NFS lands on the district. While driving his engine he

estimated winds were approximately 30-40 mph sustained after 1300 hours, and recalled his vehicle being pushed back and forth in the winds.

(b) (6), (b) (7)(C) commented he knew the fire was growing extremely quick based on the fire lookouts updates over the radio. He and his crew accessed the area via Highway 4, to FS-10. (b) (6), (b) (7)(C) stated that (b) (6), (b) (7)(C) from Bandelier National Monument was first on scene and was the initial Incident Commander (IC). Prior to arriving on scene at the fire, command had made the decision to start evacuations in the Sierra Los Penos community.

(b) (6), (b) (7)(C) explained that several days prior to the Cerro Pelado Fire his engine was dispatched to the San Juan Mesa Fire located off FS 10 and FS 269. While in route to the fire (b) (6), (b) (7)(C) and his crew noticed a Gray Chevy extended cab pickup parked near the intersection of FS 269 and FS 10. (b) (6), (b) (7)(C) recalled the driver appeared to be a 30 year old white male with a dark beard, wearing what looked like a yellow traffic vest. (A seasonal fire fighter assigned to a hot shot crew later provided him with a license plate number of (b) (6), (b) (7)(C)) (b) (6), (b) (7)(C) felt it was odd that the individual did not move his pickup as the responding engines made their way past his location while in route to the fire. He confirmed that there is cell phone service at this location and stated it was possible the individual was just making a phone call.

He and other engines arrive on scene of the fire which was burning in the mechanical logging pile. (b) (6), (b) (7)(C) stated he found the way the fire was burning to be odd. He described a large diameter single log/base burning on the west side of the pile with smaller 1 hour fuels burning on east side. The area between the log on the west and burning fuels on the east was described as being "black" and "out", so the spreading of fire did not make sense to (b) (6), (b) (7)(C) (b) (6), (b) (7)(C) said that while he and the other crews worked to extinguish the fire, his FMO drove to several other burn piles in the area to check on them prior to it getting dark.

(b) (6), (b) (7)(C) agreed to ride with SA (b) (6), (b) (7)(C) to look at the San Juan Fire, as well as drive around the Pino West RX to look at the piles that were reportedly burnt in January and February. Prior to departing the District Office (b) (6), (b) (7)(C) explained that FMO (b) (6), (b) (7)(C) had instructed him to go back to the San Juan Mesa Fire on April 20th and ensure it was contained and closer to being called out. He and his crew were to use an UTV to check as many burn piles within the RX as they could. When asked why they used a UTV he explained there were still many drifts of snow on the Forest Roads and Trails in the area and the UTV would allow them easier access.

On site at the San Juan Mesa Fire origin the pile remain intact very much the way (b) (6), (b) (7)(C) had described what he had observed on the day he responded to the call out. (b) (6), (b) (7)(C) confirmed that the fires perimeter was contained mostly to the berm of the mechanical pile. The piles in this area consisted of processed tops, with logging slash and litter pushed around the processed tops. A definitive berm consisting of soils mixed with consumed/charred woody materials extended around the remains of the burnt pile. Due to suppression efforts and an extended amount of time SA (b) (6), (b) (7)(C) was unable to locate any other possible ignition sources, other than the pile being light by fire fighters in January and or February.

(b) (6), (b) (7)(C) directed SA (b) (6), (b) (7)(C) into a second area where piles where reportedly burnt in January and or February of 2022. SA (b) (6), (b) (7)(C) turned off FS 10F and continued south to the intersection of FS 10F and an unclassified two track used by the logging contractors. (Investigators Note: Refer to map on page 10. (b) (6), (b) (7)(C) directed SA (b) (6), (b) (7)(C) to the intersection of FS 10E1 and Unclassified Trail 3. This is also the General Origin Area identified by SA (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) on June 6th.) (b) (6), (b) (7)(C) believed most of the piles in this area (Section 23) had been burnt in February of 2022. (b) (6), (b) (7)(C) directed SA (b) (6), (b) (7)(C) down Trail 1, past Trail 2, to Trail 3 and looped back to the intersection of Trail 3 and FS 10E1. He explained they checked most of the piles in the area driven on April 20th. He explained there were a few piles that held some heat, which he and other fire fighter confirmed by observing very light rising smoke and feeling for heat with their hands. If heat was found it was always located deeper in the ash berm, under a thicker crust around the edge of the piles. They utilized hand tools to open up the berms, and scatter any burning or smoldering materials toward the center of the pile to extinguish any of those materials. He could not say how many piles held heat and or which ones.

Interview of Engine Captain, Bandelier Engine 91.(b) (6), (b) (7)(C)

On June 7th, 2022, SA (b) (6), (b) (7)(C) met former Bandelier Engine Captain (b) (6), (b) (7)(C) in Santa Fe, NM. (b) (6), (b) (7)(C) had recently taken a job with Santa Fe Police Department. (b) (6), (b) (7)(C) confirmed he was on duty in the area of Bandelier

National Monument near Highway 4 on April 22nd, 2022. He and his crew responded to the smoke report and accessed the area via FS 10 south off Highway 4. They turned east onto FS 270 arriving at the intersection of FS 270 and FS 10DD. He estimated the fire was burning in the timber and logging slash in Section 23 and was spreading quickly. (b) (6), (b) (7)(C) described the fire as running in the crowns along the ridgeline northeast of FS 10DD and beginning to back down toward FS 270. He estimated winds were sustained at 40 mph at the time of his arrival. (b) (6), (b) (7)(C) explained he realized quickly that he needed to focus his efforts on evacuations due the extreme fire behavior and weather conditions. (b) (6), (b) (7)(C) said that Assistant Engine Captain (b) (6), (b) (7)(C) on NPS Engine 692 was the only one to scout the fire. (b) (6), (b) (7)(C) provided SA (b) (6), (b) (7)(C) with a telephone number for (b) (6), (b) (7)(C)

Interview of NPS Assistant Engine Captain (b) (6), (b) (7)(C)

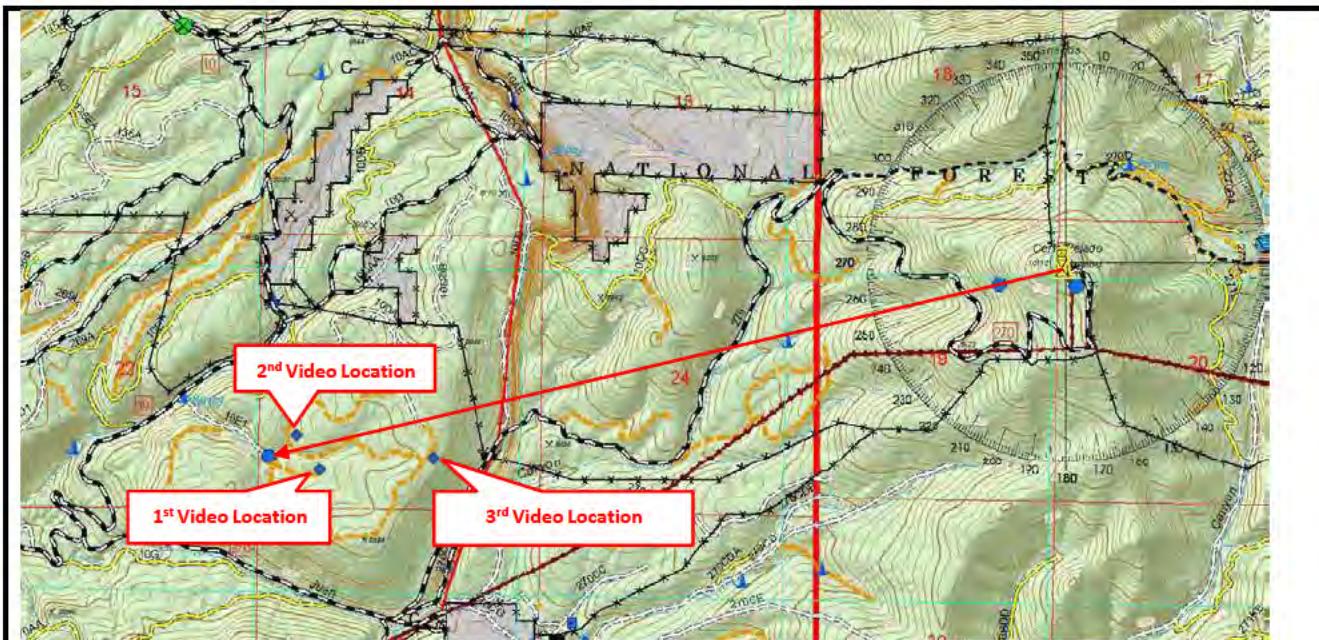
On June 7th, 2022, SA (b) (6), (b) (7)(C) met NPS Assistant Engine Captain (b) (6), (b) (7)(C) at the helibase (TA-49) located on Los Alamos National Lab. (b) (6), (b) (7)(C) confirmed he was on E-692 the day of the fire and arrived on scene at the intersections of FS 270 and FS 10DD shortly after Engine 2601 and their associated chase truck. He explained that he was the only one to hike into the heel of the fire and scout the fire. He described walking northwest upslope from the intersection of FS 270 and FS 10DD. He stated the head of the fire as running on the ridge line north of FS 270, and estimated flame lengths to be 100 feet plus in length. He estimated winds were sustained at 30 mph plus and gusting over 65 mph. He describes walking north parallel to a two track that was dropping into a drainage near the heel of the fire. (b) (6), (b) (7)(C) explains he took three videos during the scouting mission. (1 upslope of the heel, 1 in the drainage near the heel, and 1 along the ridge line above FS 270). (b) (6), (b) (7)(C) described active fire in and originating at several burn piles in the area. (b) (6), (b) (7)(C) agreed to share the videos with SA (b) (6), (b) (7)(C) ([Exhibit 10](#) (b) (6), (b) (7)(C) [Videos of General Origin Area](#)) Video "IMG_3989" was taken from (b) (6), (b) (7)(C)'s iPhone 12 at 17:11 on April 22, 2022 at 35.77290°N, 106.59690°W, "Image_3990" was taken at 17:17, at 35.77470°N, 106.59790°W, and "Image_3991" was taken at 17:32, at 35.77330°N, 106.58920°W.

Video in Image_3989 depicts unburnt fuel on the southern edge of the burn pile east of Trail 2. The pile has a significant amount of white as near the center, indicating the combustible fuels had recently burned and still likely contain a significant amount of heat. Smoke is seen rising from burning wooden material on the eastern edge, as well as from charred piece of wood within the perimeter of the burn pile. There is no signs of burnt materials and or active fire on the west side of Trail 2. Heavy black smoke is seen rising from the drainage to the north.

Video in Image_3990 depicts active fire with 5-7 foot lengths burning in small stands of ponderosa pine in a small drainage east of FS 10F/and an undesignated trail that connects with Trail 3. Immediately down drainage is the remains of a burn pile with white ash near its center, numerous partially consumed logs and active fire near its southern edge. The slope to the south has some active fire with thick white smoke seen rising from the length of the base of the slope into the timber towards the small ridgeline above.

Video in Image_3991 depicts the remains of a burn pile contain again a significant amount charred and burning materials on the east of (b) (6), (b) (7)(C)'s position. (b) (6), (b) (7)(C) is seen kicking the charred material and surface soils showing the speed and intensity of the wind.

SA (b) (6), (b) (7)(C) returned the general origin area on the evening of June 7th and recreated the videos taken by (b) (6), (b) (7)(C). See ([Exhibits 11](#) SA (b) (6), (b) (7)(C) [Recreation of \(b\) \(6\), \(b\) \(7\)\(C\)'s Videos](#))



Interview of (b) (6), (b) (7)(C) (President of TC Company)

SA (b) (6), (b) (7)(C) met (b) (6), (b) (7)(C) on FS 10 south of Sierra Los Penos at the gate entering onto NFS lands. SA (b) (6), (b) (7)(C) asked (b) (6), (b) (7)(C) if he had time to look at the area they had been working in prior to the Cerro Pelado Fire starting to which he agreed. At the intersection of FS 10 and FS 10AC (b) (6), (b) (7)(C) pointed to a road grader stating that was his grader which he had used to plow open FS 10 and FS 10DD during the winter months so he and his crew could access the unit they were cutting and processing in. (Investigator Note: On the District map provided to SA (b) (6), (b) (7)(C) FS 10AC intersects FS 10 and is shown to be FS 10DD on the southern edge of Section 14 where it enters Section 23.) (b) (6), (b) (7)(C) explained that he only plowed FS 10 and FS 10DD during January, February, and March. There was one exception when his COR (b) (6), (b) (7)(C) requested he move a loader off of FS 269 so the fire personnel could burn some piles in that area. (b) (6), (b) (7)(C) explained in order to move the loader he plowed down FS 10 to FS 269 which he stated was toward the end of February. (b) (6), (b) (7)(C) later emailed a screen shot of a Teams conversation between (b) (6), (b) (7)(C) and FMO (b) (6), (b) (7)(C). This conversation took place on February 15, the screen shot does not indicate what year. ([Exhibit 12](#) (b) (6), (b) (7)(C) **Teams Conversation**) He also provided the coordinates of 35.78309°N, -106.60065°W.

(b) (6), (b) (7)(C) stated he and his crew were the only ones to drive through the FS gate on FS 10 during the winter months and he saw the tracks almost daily and would know who was coming and going during that time frame. He said he believed the USFS fire personnel burned piles along FS 269 and in Section 23 in February and March of 2022. He recalled a USFS fire crew getting stuck off FS 10DD toward the end of January. He explained they had put chains on their pickup and buried it trying to get down into Section 23.

(b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) discussed weather conditions in the area during the fall of 2021 through April of 2022. He explained that the area did not get any moisture or snow in the fall of 2021, and experienced significant drought conditions in the summer months. As such (b) (6), (b) (7)(C) said the ground never really froze like it did in normal years. While they did receive snow in January, February, and March he explained it was the first year they never had to shut down for spring thaw.

(b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) drove to the intersection of FS 10E1 and Trail 2. There (b) (6), (b) (7)(C) explained that he and the previous wildland fire investigator had visited this area and believed it was the likely origin of the Cerro Pelado Fire. (b) (6), (b) (7)(C) confirmed the pile at this location was built by his crew during logging and stewardship related work. (b) (6), (b) (7)(C) explained that the contents of the pile were tops of the processed trees, as well as brush and logging litter that had been pushed into the pile. (b) (6), (b) (7)(C) later emailed SA (b) (6), (b) (7)(C) a picture he took of the pile and the surrounding area on the day he was there with the previous investigator. ([Exhibit 13](#) (b) (6), (b) (7)(C) **Photograph of Origin Area May 19, 2022**)

(b) (6), (b) (7)(C) and SA (b) (6), (b) (7)(C) proceeded upslope on Trail 1 to a pile that had hand line dug around the perimeter of the pile. It is unknown if the hand line was dug when fire personnel were checking piles, or if it was dug after the Cerro Pelado Fire started. The soils dug and rowed around the hand line were clumped and appeared to have been dug when there was moisture in the soils.

(b) (6), (b) (7)(C) also agreed to email SA (b) (6), (b) (7)(C) a copy of any and all load tickets originating from timber sales and or Stewardship Contracts in the area of the Cerro Pelado Fire on April 22nd, 2022. On June 8th SA (b) (6), (b) (7)(C) received an email with an attached file that he was unable to open. He received a second email on June 15th with a photograph of a load receipt from Walatowa Timber Ind date stamped 04/22/2022 at 09:43AM, Truck ID 04/211078. With the load receipt is a USDA Forest Service Scaler Permit issued out of the Jemez Ranger District. Ticket # S-03-211078 is punched April 22nd, 0800 A.M. ([Exhibit 14 Mill Load Receipt and USFS Load Ticket](#)) This supports (b) (6), (b) (7)(C)'s claim that they only hauled one load of timber from Section 24 on the day the Cerro Pelado Fire Started.

(b) (6), (b) (7)(C) stated other than hauling the one load of logs on the morning of April 22nd, he did not have any of his crew working in area. Prior to that his crew was working in a Task Order 6 miles south.

SPECIFIC ORIGIN EXAMINATION

SA (b) (6), (b) (7)(C) returned to the intersection of FS 10E1 and Trail 2 on the morning of June 8th. He began walking the perimeter of the general origin area in a counterclockwise motion, paralleling Trail 2 to the east and slightly upslope. After approximately 100 meters (b) (6), (b) (7)(C) began walking north up a short slope and across a narrow ridge line to a short slope progressing down toward Trail 3. There he walked back to the west following marco lateral fire vectors through an untreated stand of timber toward the remains of the burnt mechanical slash pile near the end of FS 10E1 and Trail 2. The investigator then reversed course walking slightly above the stand of untreated timber along the area of transition, identifying the left flank of the initial advancing fire. To his left he observed several of the smaller diameter ponderosa pine trees still bore green needles and displayed signs of foliage freeze indicating the advancing fire and heat were originating from the direction of the burnt mechanical pile. To his right he observed several trees had all the needles consumed by advancing fire with some of the smaller branch being consumed on the western side of the trees. Several stumps and smaller diameter logs displayed significant signs of charring on their west facing profiles. Depth of char and degree of consumption was great on western facing sides. This area near the center of the ridge line was identified the initial run. The right flank was less pronounced and had a thinner transition due to the wind direction and proximity to Trail 2 where fuels were significantly treated vs. the fuels adjacent to Trail 3. The investigator returned to the eastern edge of the burnt mechanical pile where he had observed smoke rising from an ash berm. The burn pile and actively smoldering ash berm was identified as the most probable competent ignition source.

The investigator walked back to the center of the run near the top of the ridge line and began walking down slope in a cross-slope grid search documenting and observing clusters of burn pattern indicators. Most commonly observing spauling on the down slope face of serval rocks, opposed by protection on the upslope face. Due to his examination of the general origin area almost 7 weeks after the fires start he observed both sooting and staining but relied more on staining as a reliable indicator. Several trees in the area ash had white as deposits on the west facing downslope face of their stems. Again due to the amount of time that had past SA (b) (6), (b) (7)(C) noted those deposits could have occurred after the initial fire. As he neared the eastern edge of the burn pile, he observed a greater number of stumps and stems with significant depth of char on the downslope face of the stems, in line with the burn pile. Within feet of the eastern side of the burn pile multiple trees had been burnt off approximately 1 foot from the ground. Depth of char and cupping was observed on the downslope side of the stump facing the burn pile.

Light grasses and smaller diameter unburnt woody fuels were prevalent on the southwestern, west, and northwestern sides of the mechanical burn pile. This indicated the wind driven fire originated at the mechanical pile, progressed upslope in the untreated stand of timber. Very little backing indicators were observed in this area.

SA (b) (6), (b) (7)(C) then took video walking in the same counter clockwise direction starting at the heel and progressing past burn pile and ash berm on the right flank. ([Exhibit 15 SA \(b\) \(6\), \(b\) \(7\)\(C\) Specific Origin Area Video](#))

SA (b) (6), (b) (7)(C) then flagged fire progression indicators and photograph the area. [\(Exhibit 16 SA\)](#) (b) (6), (b) (7)(C) **Specific Origin Area Photo Exhibit**

A second possible origin area was photograph at intersection of Trail 3 and the end of FS 10E1. [\(Exhibit 16 SA\)](#) (b) (6), (b) (7)(C) **Specific Origin Area Photo Exhibit**

The investigator attempted to examine the smoldering ash berm however was unable to fully excavate the full depth of the berm due to the amount of heat radiating from the deepest parts. The investigator inserted a metal spade closest to the center he could safely and physically reach. He marked the shaft of the shovel with sharpie in order show the depth at place of insertion. Upon removing the metal spade SA (b) (6), (b) (7)(C) was unable to touch the shaft and or blade of the shovel with a leather glove on his hand due to the extreme temperature. After the shovel cooled SA (b) (6), (b) (7)(C) was able to measure the sharpie mark at almost 2 feet. The overall depth at the deepest location was like just over 3 feet deep. [\(Exhibit 16 SA\)](#) (b) (6), (b) (7)(C) **Specific Origin Area Photo Exhibit**

CAUSE DETERMINATION

Debris Burning - Wildland fires caused by debris burning activities including residential (pile, barrel, hazard reduction) and industrial (logging operations, land clearing, agricultural, forestry, right-of-way hazard reduction, or other controlled burning). "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 211, (2016).

Debris Burning/Escaped Hold Over Fire was determined to be the cause of the Cerro Pelado Fire. USFS Wildland Fire personnel from the Jemez Ranger District reportedly burned numerous mechanical piles associated with logging and stewardship activities during the Pino West RX. USFS AFMO (b) (6), (b) (7)(C) stated he estimated piles within the Pino West Piles RX were initially ignited in January and concluded on February 19th, 2022, or shortly thereafter. Jemez Ranger District personnel were unable to give an exact date or dates when piles within the Pino West RX were checked between the initial ignition and 04/20/2022. USFS Engine Captain (b) (6), (b) (7)(C) stated he and a module of 6 additional employees were instructed by FMO (b) (6), (b) (7)(C) to check the burned piles within the Pino West RX on 04/20/2022. (b) (6), (b) (7)(C) stated that he and members of his module did locate piles within the RX that did retain heat (specifically within Section 23). (b) (6), (b) (7)(C) explained he and other on scene firefighters determined the piles referenced retained heat by visually looking for smoke, then feeling the area with their hands for heat. (b) (6), (b) (7)(C) explained the piles that contained detectable heat were those with larger diameter partially consumed logs and ash berms with an ash crust near the outer perimeter of the mechanical logging piles that were checked. When heat was detected fire personnel would open the berms with hand tools and spread the ash and embers within the consumed perimeter of the pile. (b) (6), (b) (7)(C) escorted SA (b) (6), (b) (7)(C) to the Pino West RX area on 06/07/2022 in order to show him the exact area where piles were initially ignited, and later checked on 04/20/2022. (b) (6), (b) (7)(C) was unable to identify exactly what piles contained heat on 04/20/2022.

Multiple days of red flag conditions reportedly occurred between the 1st of April and the day the Cerro Pelado Fire started. The red flag conditions quickly melted significant snow cover in a short amount of time. Relative Humidity in the 8% range, combined with high winds, and warmer temperatures most likely caused most of the moisture content in the snow to evaporated and was likely not absorbed by the soils and fuels on top of the soil. This area had experience drought condition during the prior summer, and persons interviewed reported the area did not receive any measurable moisture in the fall. SA (b) (6), (b) (7)(C) determined the 1 hour fuels in this area likely contained very little fuel moisture on the day the Cerro Pelado Fire started.

Winds during the red flag conditions likely exposed the ash berms around the pile in question as well as others in the area. After the berms were exposed, impinging winds likely increased ventilation and oxygen levels to the smoldering woody materials within the berms. The increased oxygen concentration then increases temperatures and likely caused a transition from smoldering to flaming of the fuels within the berm as well as adjacent fuels to the pile. "Research Report Completed by (b) (6), (b) (7)(C), Ph.D. Research Forester USDA Forest Service, Missoula Fire Sciences Laboratory."

Industrial debris burning, such as logging slash or other forest industry pile burning, can develop ash crusts similar to that described in the section on campfires, creating residual heat for months. Often, by the time these larger industrial burn piles are exposed and become active again, forest debris such as leaves and needles have covered any attempts at

control lines around the piles, allowing the fire a path of escape by direct burning or windblown ember. There are numerous documented instances where these fires having escaped the following spring after being originally burned the preceding fall. This may be due to a mixture of dirt and ash which insulates the hot embers within the debris that is piled by these activities. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 212, (2016).

Early morning winds blew up FS 10E1 impacting the mechanical burn pile constructed at the intersection of FS 10E1 and Trail 2. Winds likely blew embers from the smoldering material in the ash berm into and onto receptive fuels upslope and upwind of the burn pile. Wind velocity increased significantly at approximately 1300 hours, and by 1530 hours the fire lookout on Cerro Pelado estimated the wind was sustained at 30 mph southwest.

The wind driven fire spread upslope quickly in an untreated stand of timber which was immediately adjacent to the burn pile. Once the advancing fire crested a small ridgeline it entered into an area that had been recently logged and masticated as part of a stewardship project. The rapidly growing advancing fire was subjected to stronger winds due to the lack of vegetation and a significantly thinned stand of timber, combined with a large amount of 1 hour fuels on the surface.

Other Fire Cause Categories Investigated

Lightning - Lightning is discharged static electricity associated with thunderstorm activity. Lightning is typically a series of short bursts approximately two inches in diameter, lasting for about one-half second. These lightning discharges include cloud-to-ground strikes which are in the range of 100 million volts, 200,000 amperes, and 54,000 °F. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 197, (2016).

The circumstances indicating a possible lightning strike as a cause includes recent electrical storm (hours/days/weeks) activity in the area, the presence of indicators of *sleepers* and *holdovers*, scarring on trees or snags, precipitated sap, *needle shower*, ballistic penetration of adjoining vegetation by needles and small twigs or splinters, *blow-holes* at base of tree, fulgurites, and splintered wood or vegetation. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 197, (2016).

A private company contracted to detect cloud to ground and cloud to cloud lightning, verified zero cloud-to-ground lightning strokes detected within a 5 mile radius of the GPS coordinates provided for the dates between 04/08/2022 through 04/2022/2022. No lightning scars were observed on any of trees or shrubs in the specific origin area during SA (b) (6), (b) (7)(C) investigation. No blowholes or fulgurites were observed in the specific origin area. For these reasons, Lightning can be excluded as a possible cause. (Exhibit 3 Lightning Report)

Equipment Use - Wildland fires resulting from the operation of mechanical equipment excluding railroads. Types of mechanical equipment range from heavy construction to small portable engines. Equipment use caused fires may be viewed in five parts:

1. Exhaust system particles.
2. Friction and sparks.
3. Fuel, lubricant, fluids.
4. Mechanical breakdown or another malfunction.
5. Radiant or conductive heat transfer.

"NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 215, (2016).

No evidence of equipment use was reported in the specific origin area of the fire. At the time of ignition SA (b) (6), (b) (7)(C) was told by USFS Fire Personnel as well as loggers the roads accessing the origin area were mostly impassable due to large amounts of snow on FS roads and trails. For these reasons, Equipment Use can be excluded as a possible cause.

Smoking - Wildfires caused by smoking activities or accoutrements, including matches, cigarettes, cigars, pipes,

illegal substances, etc. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 207, (2016).

To effectively assess the probability of a cigarette as a competent ignition source, consider the following: physical characteristics of the cigarette, environmental factors, physical placement factors. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 207, (2016).

Cigarette ignition factors are; 0% Relative Humidity (RH) = Start Likely, 10% RH = Start Possible, 18% RH = Start Unlikely and 22% RH = No Start. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 208, (2016).

Environmental factors include: finely particulated fuel bed, loose fuel arrangement, fine dead fuel moisture (FDFM) less than 14%, 80 °F + ambient temperature, microclimate location (temperature at ground level vs. temperature at higher level), Relative Humidity (RH) of 22% or less. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 208, (2016).

Relative Humidity was measured between 7% and 9% at two weather stations nearest to the specific origin area, temperatures at the time of ignition was at or near 70° degrees. The relative humidity ranges were within environmental factors making a start possible. No evidence of cigarettes or smoking was discovered in the general or specific origin areas. The specific origin area is in a remote area with areas of the road covered in snow making access with a full-size vehicle difficult. For these reasons, Smoking can be excluded as a possible cause.

Camp Fire - Any fire kindled for warmth, cooking, light, religious or ceremonial purpose. Campfires may occur at any location. Responsible parties may include hunters, campers, anglers, hikers or transients (homeless). Regulations often address attendance, clearance, and periods of use, suppression tools, and proper extinguishment. Violations of these regulations often result in escaped fires. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 202, (2016).

No evidence of a campfire ring, or any other evidence of recreational camping was observed in the general or specific origin areas. For these reasons, Camp Fire can be excluded as a possible cause.

Railroad - Fires caused by any railroad operations, personnel, rolling stock and can include track and right-of-way maintenance. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 229, (2016).

Railroad structures such as trestles, bridges, and ties, are included in this category of fire cause. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 229, (2016).

General railroad ignition factors include; exhaust carbon, brake shoe particles, track maintenance, right-of-way maintenance, dynamic grid failure, signal flares, wheel slip, wheel bearing failure (hotbox) and transients. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 230, (2016).

There are no railroad operations in or near the general or specific origin area. For these reasons, Railroad can be excluded as a possible cause.

Incendiary - Wildfires deliberately or maliciously set with the intent to damage or defraud. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 215, (2016).

Arson: The intentional and wrongful burning of someone else's property or one's own property (as to fraudulently collect insurance). (Garner, 2009) "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 299, (2016).

Incendiary: Deliberately and unlawfully set fire to property. (Garner, 2009) "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 299, (2016). These terms are often used interchangeably.

No evidence of arson or incendiary activity was discovered in the general or specific origin areas. No incendiary devices; mechanical, chemical, or electrical were observed and or recovered. No modified fuel beds were observed in the general origin area. Local USFS Law Enforcement had no knowledge of recent arson or suspected arson activities in the immediate area. Incendiary can be excluded as a possible cause.

Children - Wildfires started by persons 12 years of age or younger. The child may be motivated by normal curiosity and use fire in experimental or play fashion. Matches or lighters are the most frequent ignition source. It often involves multiple children. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 243, (2016).

No report of children observed in or near the general or specific origin areas. Nearest occupied residential structures are approximately 2 miles north of the specific origin area. Investigators did not observe or uncover any evidence of fire play in the general or specific origin areas. For these reasons, Children can be excluded as a possible cause.

Miscellaneous - Wildfires that cannot be properly classified under other standard causes. Some of these are listed below but can include other ignition sources that are not listed. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 245, (2016).

Powerlines: The category of powerlines includes all electrical equipment associated with the production, transmission, and use of electricity. The electrical grid or system for the transmission, distribution, and service of customers forms a complex web and is governed by regulations. The transmission of electricity has long been recognized as having an inherent danger above and beyond typical hazards. Early electrical distribution systems caused numerous fires, better engineering and prevention efforts have reduced the number. Powerlines are an ignition source that can lead to major fires, as many of the conditions that contribute to system faults and failures coincide with extreme fire behavior. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 245, (2016).

No powerlines are located in the general or specific origin areas. For this reason, powerlines can be excluded as a possible cause.

Fireworks: Fireworks may be classified in several different ways depending upon the jurisdiction. Most fireworks will fall into one of three categories, ground based and hand-held, aerial, or explosive. Fireworks are known to cause major property damage annually including fires to both wildland and structures. Used in an unsafe manner, fireworks can discharge burning material into flammable vegetation. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 263, (2016).

There was no evidence of fireworks found in the general and or specific origin areas, including packaging, fuses, matches, mortar tubes or the remains of spent fireworks. There were no reports of fireworks being seen or heard in the area. For these reasons, fireworks can be excluded as a possible cause.

Firearms and Ammunition: Black powder discharge, tracer, incendiary, solid copper, and copper jacketed and various types of ammunition are capable of causing wildfires through the discharge of hot materials or mechanical sparks caused when a bullet strikes a hard object and fragments, creating hot particles which land in the dry fuels. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 266, (2016).

There was no evidence of firearm use in or near the general and or specific origin areas. There was no ammunition packaging or targets found in the general origin area and specific origin areas. For these reasons, firearms and ammunition use can be excluded as a cause.

Exploding Targets: Exploding targets detonate upon impact of the projectile, sending out hot particles. Exploding targets are typically a mixture of more than one compound which is generally not considered an explosive until combined. Exploding targets come commercially manufactured in either low or high velocity types. Homemade versions are also being used with similar effects. Once mixed, the compounds form an explosive device. Wildland fire investigators working a scene which may include an exploding target should use caution when handling, collecting, packaging and storing residue or devices. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 270, (2016).

There was no evidence of exploding targets being used in the general and or specific origin areas. No spent bullet casings or ammunition packaging were found in the general origin area and specific origin area. For these reasons, exploding targets can be excluded as a cause.

Cutting, Welding, and Grinding: These types of ignitions are normally caused by an industrial or agricultural operation, but may also result from an individual or residential activity. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 274, (2016).

There was no evidence of cutting, welding and/or grinding in the general and or specific origin areas. For these reasons, cutting, welding, and grinding can be excluded as a cause.

Spontaneous Heating: Certain fuels will self-heat and ignite spontaneously when conditions support a combination of biological and chemical processes. This action is most likely to occur after periods of warm humid days in decomposing piles of organic material such as hay, grains, feeds, manure, sawdust, wood chip piles, and piled peat moss. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 277, (2016).

Environmental factors and receptive fuels needed for spontaneous heating were not present at the time of the fire ignition. For these reasons, spontaneous heating can be excluded as a cause.

Coal Seam Fires: Coal seams may be ignited by lightning, wildfires, or other ignition sources. Fires typically burn slowly along the seam and may resurface when seam nears the surface which cracks, and oxygen is introduced to the burning seam. These fires are dangerous to investigate as the burning coal seam may lie just under the surface. Coal seam fires may be visible in the winter with steam plumes and random bare patches in the snow from underground heating. Patches of dead vegetation may also be a tip that underground heating from a coal seam fire is taking place. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 282, (2016).

No active coal seams in the general or specific origin areas. For this reason, coal seam fires can be excluded as a cause.

Electric Fences: Fires originating from electric fences used to contain domestic animals. Rapid electric pulse cycle does not allow fuel to cool down. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 283, (2016).

No electric fencing was observed in the general or specific origin areas. For this reason, electric fences can be excluded as a cause.

Refraction (Reflection): The sun’s rays can be focused to a point of intense heat if concentrated by certain glass or shiny objects. This refraction or reflection process bends light rays, similar to that which occurs through a magnifying glass. The shiny, concave end of a metal-can may focus sunlight, but its short focal distance makes the potential as a possible cause highly unlikely. Fires started by these items are extremely rare occurrences; however, objects possessing these characteristics recovered from the specific origin Area may need to be carefully examined to determine their fire-starting potential. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 285- 286, (2016).

No glass or other light-focusing materials were found in the general and or specific origin areas. For these reasons, refraction (reflection) can be excluded as a cause.

Blasting: Fires started by flaming debris associated with blasting activities. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 286, (2016).

No blasting had been conducted in the general origin area. For this reason, blasting can be excluded as a cause.

Flares: Fires resulting from commercial, industrial, or military flares. Compound is usually a mixture of sawdust, wax, sulphur, strontium nitrate, and potassium perchlorate. Flares burn at approximately 3600°F. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 287, (2016).

No burned-out flares, slag, plastic caps or other discarded parts of a flare were discovered in the general and or specific origin areas. For these reasons, flares can be excluded as a cause.

Oil and Gas Fires: Fires associated with the recovery and pumping of oil and gas products in the wildland. Flare pit and stack fires are among some types of oil and gas fires which may be encountered in the wildland environment. Flare pit and stack operations are designed to burn off excess or unwanted petroleum by-products. Occasionally these will start fires from direct flame impingement, the igniter flare or stack particles. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 290, (2016).

Neither gas nor oil extraction operations exist in the vicinity of the general origin area. For this reason, oil and gas fires can be excluded as a cause.

Flying Lanterns: Flying lanterns are miniature hot air balloons made from paper or plastic, bamboo or lightweight wood, and wire with a solid fuel package. Homemade lanterns may use plastic garbage sacks. Originating in Asia and called happiness balloons or wish balloons their use has spread around the world, and they are commonly used during weddings or other celebrations. Experimentation by young adults or teenagers is commonly associated to fires caused by flying lanterns, particularly if homemade. Manufacturers claim that the paper is treated with a fire retardant, but many are not. Flying lanterns can travel miles away from release site and are capable of reaching several thousand feet in altitude. Multiple lanterns may be released at a single time. Releases typically occur during nighttime hours for full visual effect but can also be deployed during daytime activities. Note: Oregon has classified flying lanterns as fireworks and banned them from use within the state. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 293, (2016).

No remains of a flying lantern were found in the general and or specific origin areas. There were no reports of flying lanterns being seen in the area prior to discovery of the fire. Flying Lanterns are uncommon for the area and would be difficult to impossible to launch in the strong winds on April 22, 2022, due to being unable to keep the fabric from collapsing as it collects the hot air needed to attain lift. For these reasons, flying lanterns can be excluded as a cause.

Wind Turbines: Wind turbines use wind flow to generate electrical energy and are increasingly being placed into the wildland environment. Where more than one wind turbine is in the same area, the term wind farm may be used. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 295, (2016).

Wind turbines do not exist in the vicinity of the Cerro Pelado Fire. For this reason, wind turbines can be excluded as a cause.

Home Outdoor Wood Burning Furnaces: Referred to as outdoor wood furnaces or outdoor wood boilers, these devices can be modern manufactured models or homemade. They can be used to heat a structure by way of connecting to a central heating unit and/or are used to provide hot water. Either way, the furnace operates by burning firewood and may be burning wood even in the warmer parts of the year if it is being used to heat water also. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 296, (2016).

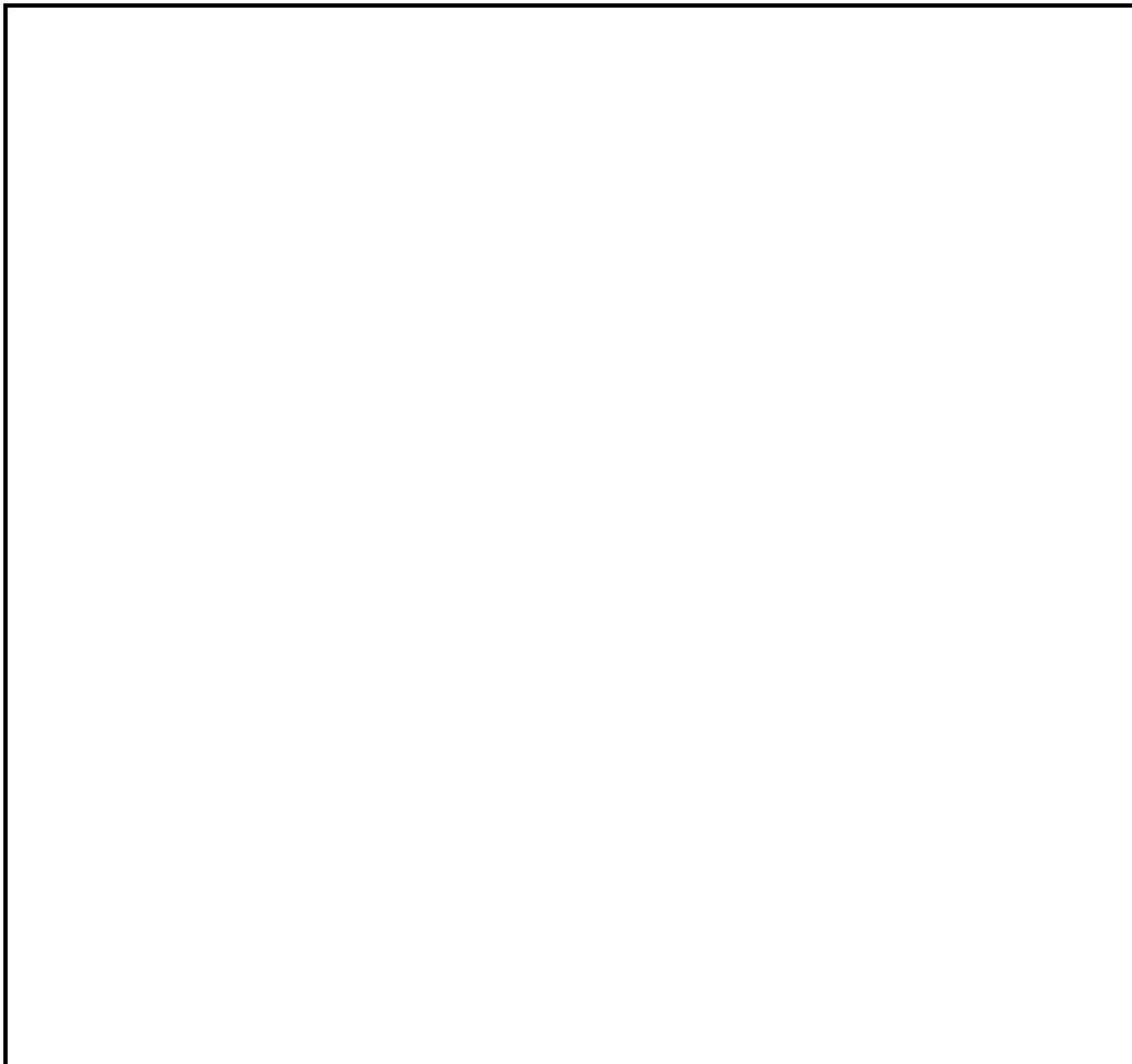
No wood burning furnaces or boilers exist in the general origin area of the Cerro Pelado fire. For this reason, home outdoor wood burning furnaces can be excluded as a cause.

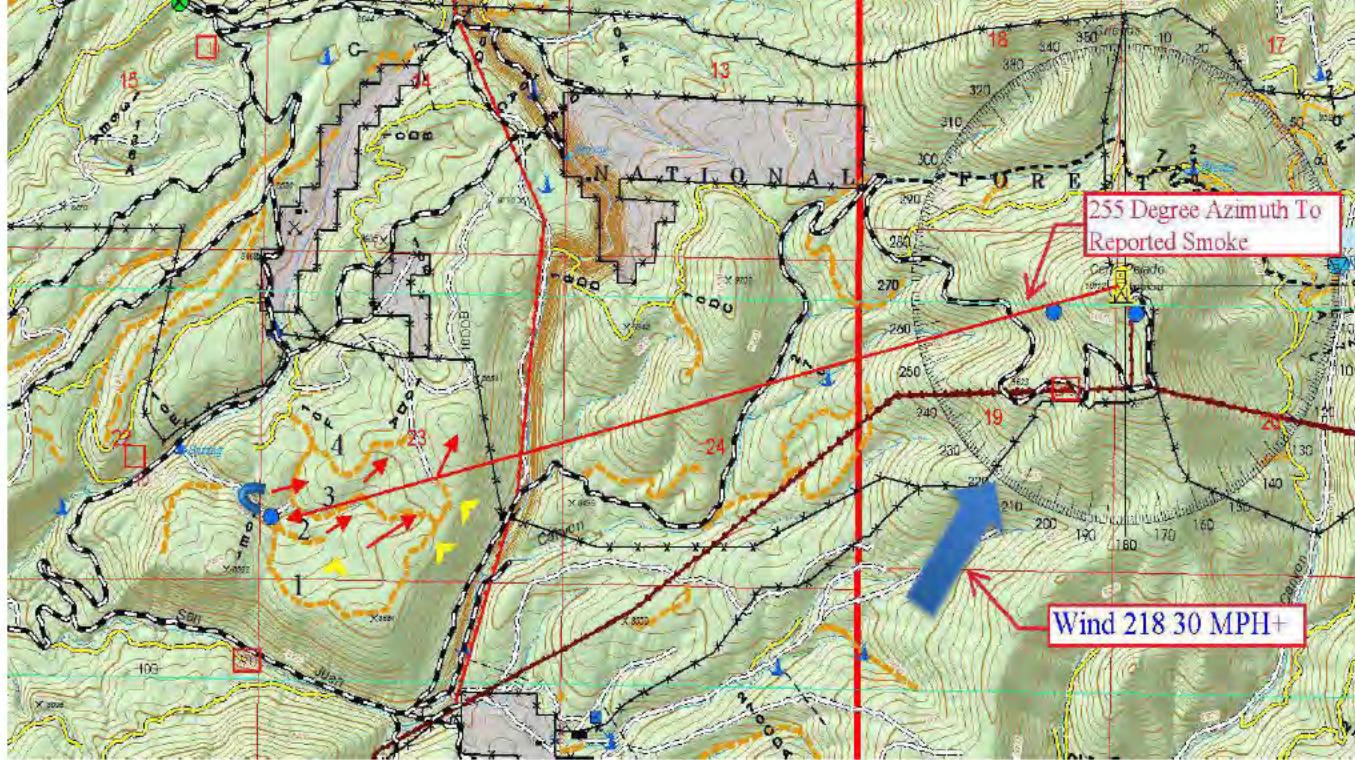
Structures: Fire spreading to the wildland due to failures or activities associated with a structure. “NWCG Handbook”, PMS 412, NFES 1874, Chapter 6, page 296, (2016).

No structures are located within the general or specific origin areas. For this reason, Structures can be excluded as a cause.

USDA Forest Service

FS-5300-45 (9/2013)



 USDA Forest Service		Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)					Incident Number	IAIP004	
							Incident Date	04/22/2022	
Fire Name	Cerro Pelado								
Latitude	35°	46'	25"	Longitude	106°	35'	55"	Datum	WGS 84
FIRE SCENE SKETCH (INCLUDE SCALE, TITLE, AUTHOR, NORTH ARROW, DATE AND TIME)									
 <p>The map shows contour lines, roads, and streambeds. A red line indicates the fire perimeter. A blue arrow points from the bottom right towards the center, labeled "Wind 218 30 MPH+". A red arrow points from the center towards the top right, labeled "255 Degree Azimuth To Reported Smoke". A north arrow is located near the center of the map.</p>									
SCALE	NOT TO SCALE	AUTHOR	SA (b) (6), (b) (7)(C)	DATE	6/8/2022		TIME	0900	

 USDA Forest Service		Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)		Incident Number	IAIP004
				Incident Date	04/22/2022
PHOTOGRAPHIC LOG					
FIRE NAME	Cerro Pelado Wildfire			DATE	6/8/2022
CAMERA	Digital	PHOTOGRAPHER	SA	(b) (6), (b) (7)(C)	

IMAGE No.	DESCRIPTION	DIRECTION OF PHOTO (COMPASS)
1	Reference Point install in stump near heel of the fire	Down
2	Specific Origin Area with advance fire upslope	South
3	Specific Origin Area/Right Flank paralleled by two track	South
4	Specific Origin Area/Left Flank	South
5	Backing north of Specific Origin Area	South
6	Backing Indicator	Down
7	Backing Indicator	Down
8	Advancing Indicator/Depth of Char/Damage Differential	South
9	Compare and Contrast/Opposite side of Photo 8	North
10	Advancing Indicator/Cupping	South
11	Advancing Indicator/Cupping	East
12	Compare and Contrast/Opposite side of Photo 10	North
13	Advancing Indicator/Cupping	Down
14	Advancing Indicator/Cupping	Down
15	Advancing Fire Vector	South
16	Advancing Indicator/Depth of Char	South
17	Compare and Contrast/Opposite side of Photo 16	North
18	Right Flank/Degree of Consumption	West
19	Right Flank/Cross Slope of Advancing Fire	East
20	Right Flank/Transition	South
21	Right Flank/Transition	East
22	Left Flank/Transition	South
23	Left Flank/Transition	North
24	Advancing Indicator/Spalling	South
25	Advancing Indicator/Spalling	Down
26	Compare and Contrast/Opposite side of Photo 25	North
27	Advancing Fire(Run) Originating from Mechanical Logging Pile East of First SOA	Northwest
28	Advancing Fire(Run) Originating from Mechanical Logging Pile East of First SOA	Southeast
29	Right Flank of Advancing Fire from Mechanical Logging Pile East of First SOA	West
30	SOA of Mechanical Logging Pile East of First SOA	Northwest
31	Right Flank of Advancing Fire from Mechanical Logging Pile East of First SOA	North
32	SOA of Mechanical Logging Pile East of First SOA	Northwest
33	SOA of Mechanical Logging Pile East of First SOA	Northwest
34	Thick Stand of Small Diameter Ponderosa Pines on Left Flank of Second SOA	Northeast
35	SOA of Mechanical Logging Pile East of First SOA	Northwest
36	SOA of Mechanical Logging Pile East of First SOA	Southeast
37	Overall from Heel of SOA of from Mechanical Logging Pile East of First SOA	South
38	Overall from Heel of SOA of from Mechanical Logging Pile East of First SOA	Southeast
39	Metal Spade in Ash Berm on First SOA	East
40	Displaying Depth of Approximately 2 Feet	

Instructions for filling out the FS-5300-45, Wildland Fire Origin and Cause Supplemental Incident Report LOCATION

Fire Name: The fire incident name assigned to the individual fire. If several fires have been combined into a Complex, use the individual name of the fire rather than the Complex name. There may be several independent investigations for the various individual fires within a Complex, each requiring an individual O&C report.

Dispatch #: The alpha-numeric designator used by dispatch for the State-County-Year-WildCad # (e.g. CO-MLX-2013-246)

Account code – the “P code” assigned to the fire.

REGION: Two digit Region identifier (e.g. 01)

FOREST: Two digit Forest identifier (e.g. 08)

DISTRICT: The single or two digit District identifier (e.g. 3 or 50)

STATE: Two letter alpha identifier of the State (e.g. AZ)

COUNTY: Spell out the county name.

ORIGIN LOCATION: Use common geographical names and road numbers that would allow the reader to locate the general fire location on a map.

TOWNSHIP/RANGE/SECTION/1/4 SECTION: Example 39N, 1W, 18

MERIDIAN/DATUM: Enter the meridian used for the Township and Range reference and enter the datum used for the latitude and longitude reference (e.g. NMPM/NAD83)

JURISDICTION

USFS ONLY: Enter “yes” or “no” based on the land ownership burned by the fire. If the fire burned onto non-National Forest System land enter “no” and then fill in “**IDENTIFY OTHER AGENCY(S)**” with the State or local agency having concurrent jurisdictional responsibility for the fire investigation.

LEAD ORIGIN & CAUSE INVESTIGATOR: Title and name of the lead Forest Service O&C Investigator.

EST. SUPPRESSION COST: Estimated total suppression costs. This includes Forest Service and assisting agencies’ costs. This information can generally be obtained from Incident Business Management Team or IC.

INJURIES/DEATHS: Number of serious injuries or deaths as a result of the fire.

EVENT SEQUENCE

ESTIMATED TIME OF IGNITION: An estimate based on factors such as the time of the initial report, the fire behavior, and the O&C investigation. The “**WHO**” is the name of the individual making the estimate.

TIME FIRE REPORTED: The time of the first report of the fire. The “**WHO**” is the name of the individual who first reported the fire.

TIME ORIGIN PROTECTED: The time and date the actual origin area was secured, either by fire crews or investigators.

TIME ORIGIN RELEASED: The time and date the actual origin area investigation was complete and the area was opened to the public or other investigators.

FIRE BEHAVIOR

ESTIMATED ACRES: Estimated total acreage at fire containment, or at time of report.

FUEL TYPE @ IGNITION AREA, MATERIAL FIRST IGNITED: e.g. grasses, pine needles, duff

WEATHER OBSERVER (ON SCENE): Name of the individual who took weather readings or weather observations at time closest to ignition of fire. Generally is a person with the initial attack crew.

SLOPE: Percent slope at the specific origin area.

ASPECT N E S W: Direction the specific origin area is facing.

ELEVATION: Elevation of the specific origin area.

WEATHER STATION: DATE, TIME, TEMP, RH, WIND DIR, WIND SPEED: Name of the closest Remote Automated Weather Station (RAWS) and the readings from the RAWS at the time closest to the estimated time of ignition.

CAUSE DETERMINATION

Use a two letter identifier for the level of certainty for each of the nine cause categories listed. The level of certainty is based on the definitions used in NFPA 921, 4.5.1. Explain the determination (PS, PR, EX) in detail for each of the nine categories. It is not necessary to go into detail on the ignition sources that are clearly not possible. This is based on the investigation results and/or the absence of the cause at the origin (e.g. no railroad in the origin area). The form expands to accept unlimited narrative in each of the nine cause categories blocks.

PS = POSSIBLE: At this level of certainty, the hypothesis can be demonstrated to be feasible but cannot be declared probable. If two or more hypotheses are equally likely, then the level of certainty must be “possible.” Describe how you “tested” each hypothesis.

PR = PROBABLE: This level of certainty corresponds to being more likely true than not. At this level of certainty, the likelihood of the hypothesis being true is greater than 50%. Describe how you “tested” the hypothesis and arrived at a determination of probable.

EX = EXCLUDED: A determination of “excluded” should be used if the cause is not possible or probable.

CAUSE DETERMINED: Either this field or the “cause undetermined” field should be filled out; not both. State the actual cause and give a brief summary explaining the cause.

CAUSE UNDETERMINED: Give a brief summary of why the cause is “undetermined.” An undetermined fire cause may later be changed to “cause determined” if new evidence becomes available.

SUBJECT/WITNESS/VICTIM/REPORTING PARTY/OTHER: Self-explanatory.

VEHICLE INFORMATION: Self-explanatory

EVIDENCE/PROPERTY INFORMATION:

Use evidence/property on form FS-5300-48 and FS-5300-49 and attached to FS 5300-45. (Law Enforcement and Investigation Inventory of Seized or Impounded Property).

INSURANCE INFORMATION:

The cost of fire suppression and resource damages can often be recovered by ASC-Claims through Homeowners, Automobile, or Umbrella policies of the individual or company who caused the fire. Include as much of this information as available.

SYNOPSIS:

(DATE, FIRE NAME, ESTIMATED ACRES, LOCATION, JURISDICTION); (ESTIMATED COST, DAMAGE; PROPERTY / RESOURCE); (CAUSE; DETERMINED / UNDETERMINED): Give a brief, one or two paragraph summary of the fire, including information on each of the items listed in this heading.

DETAILS OF INVESTIGATION:

(INITIAL REPORT, INITIAL ATTACK, INITIAL INVESTIGATION, FIRE BEHAVIOR ANALYSIS, STATEMENTS, ORIGIN

EXAMINATION, CAUSE DETERMINATION: Provide a detailed write-up of the fire origin and cause investigation, including but not limited to how and when the fire was initially reported, who reported it, who it was reported to; provide details on who responded on the initial attack, both citizens and initial fire crew response, and describe the suppression actions they took that are relevant to the origin investigation.

Describe in detail the methodology used by the qualified fire investigator(INVF) for the investigation of the General Origin Area, the Specific Origin Area, and the Ignition Area of the fire. Also include details in this section about on scene weather data, lightning data, 911 call logs, and RAWS information as it relates to the origin and cause determination. Reference and attach documents, statements, and photographs as needed. Include information about the fire behavior as it relates to the ignition factors and origin determination. Attach the report of the Fire Behavior Analyst (FBAN) if used or referenced.

Describe in detail the cause determination: how did the heat source come in contact with the materials first ignited, what were the ignition factors (e.g. windy conditions, burning without proper clearances, no screen on burn barrel, inadequate spark arrestor, etc.).

FIRE SCENE SKETCH

(INCLUDE SCALE, TITLE, AUTHOR, NORTH ARROW, DATE AND TIME): Insert the fire scene sketch or diagram on this page. The document can be scanned and inserted electronically at this location in the form.

PHOTO LOG

DATE: The date the photographs were taken.

CAMERA: The camera model used to take the photographs (e.g. Nikon D100).

PHOTOGRAPHER: The name of the person taking the photographs. If there are multiple photographers, consider using a separate page for the additional photographer(s).

IMAGE NO: Enter the original image number assigned by the camera (e.g. DSC_0171). If the image number is “renamed” by the author include that in the “Description” section.

DESCRIPTION: Enter a description of what the photograph is showing. If the photograph is showing a fire pattern indicator include the indicator category, the item depicted, and the fire vector (e.g. Protection, pine cone, Advancing).

DIRECTION OF PHOTO (COMPASS): Enter the compass direction the camera is facing when the picture was taken (e.g. N, ENE, SW, etc.).

EXHIBIT #: 3

TITLE: Prescribed Fire Burn Plan

CASE NUMBER: 23-03-IAIP004

Prescribed Fire Name: District Wide Burn

Ignition Unit Name: Multiple

Element 1: Signature Page**PRESCRIBED FIRE PLAN****ADMINISTRATIVE UNIT NAME(S):** Jemez Ranger District, Santa Fe National Forest**PRESCRIBED FIRE NAME:**

Prescribed Fire Unit (Ignition Unit): District Wide Pile Burn Plan

PREPARED BY:

Name (print): (b) (6), (b) (7)(C) Qualification/Currency: RXB2 2023

(b) (6), (b) (7)(C)

Signature

Date: 9/26/19

(b) (6), (b) (7)(C)

Date: 12/1/20 - Covid 19
Amendment**TECHNICAL REVIEW BY:**

Name (print): (b) (6), (b) (7)(C) Qualification/Currency: RXB2 10 (2022)

(b) (6), (b) (7)(C)

Signature:

Date: 10/17/19

COMPLEXITY RATING: LOW**MINIMUM BURN BOSS QUALIFICATION:** RXB3**APPROVED BY:**

(b) (6), (b) (7)(C)

Name – Agency Administrator (print): _____

Signature – Agency Administrator: (b) (6), (b) (7)(C) Date: 11/5/2019

12/1/2020

00109

Prescribed Fire Name: Joaquin Rx _____

Ignition Unit Name: Joaquin Pres 2019 Rx _____

Element 2A: Agency Administrator Ignition Authorization

Instructions: The Agency Administrator Ignition Authorization must be completed before a prescribed fire can be implemented. If ignition of the prescribed fire is not initiated prior to expiration date determined by the agency administrator, a new authorization will be required.

Prior to signature the agency administrator should discuss the following key items with the fire management officer (FMO) or burn boss. Attach any additional instructions or discussion documentation (optional) to this document.

Key Discussion Items

- A. Has anything changed since the Prescribed Fire Plan was approved or revalidated?

Such as drought or other climate indicators of increased risk, insect activity, new subdivisions/structures, smoke requirements, Complexity Analysis Rating.

- B. Have compliance requirements and pre-burn considerations been completed?

Such as preparation work, NEPA mitigation requirements, cultural, threatened and endangered species, smoke permits, state burn permits/authorizations.

- C. Can all of the elements and conditions specified in Prescribed Fire Plan be met?

Such as weather, scheduling, smoke management conditions, suitable prescription window, correct season, staffing and organization, safety considerations, etc.

- D. Are processes in place to ensure all internal and external notifications and media releases will be completed?

- E. Have key agency staffs been fully briefed about the implementation of this prescribed fire?

- F. Are there circumstances that could affect the successful implementation of the plan?

Such as preparedness level restrictions, resource availability, other prescribed fire or wildfire activity

- G. Have you communicated your expectations to the Burn Boss and FMO regarding if and when you are to be notified that contingency actions are being taken?

- H. Have you communicated your expectations to the Burn Boss and FMO regarding decisions to declare the prescribed fire a wildfire?

(b) (6), (b) (7)(C)

Implementation Recommended by:

FMO or Prescribed Fire Burn Boss Signature: 

Date: 11/21/2019

I am authorizing ignition of this prescribed fire between the dates of 12-2-19 and 12-22-19. It is my expectation that the project will be implemented within this time frame and as discussed and documented and attached to this plan. If the conditions we discussed change during this time frame, it is my expectation you will brief me on the circumstances and an updated authorization will be negotiated if necessary.

Additional Instructions or Discussion Documentation attached (Optional): Yes No

(b) (6), (b) (7)(C)

Ignition Authorized by:

Agency Administrator Signature and Title: 

District Ranger Date: 11/21/2019

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple

Element 2A: Agency Administrator Ignition Authorization

Instructions: The Agency Administrator Ignition Authorization must be completed before a prescribed fire can be implemented. If ignition of the prescribed fire is not initiated prior to expiration date determined by the agency administrator, a new authorization will be required.

Prior to signature the agency administrator should discuss the following key items with the fire management officer (FMO) or burn boss. Attach any additional instructions or discussion documentation (optional) to this document.

Key Discussion Items

A. Has anything changed since the Prescribed Fire Plan was approved or revalidated?

Such as drought or other climate indicators of increased risk, insect activity, new subdivisions/structures, smoke requirements, Complexity Analysis Rating.

B. Have compliance requirements and pre-burn considerations been completed?

Such as preparation work, NEPA mitigation requirements, cultural, threatened and endangered species, smoke permits, state burn permits/authorizations.

C. Can all of the elements and conditions specified in Prescribed Fire Plan be met?

Such as weather, scheduling, smoke management conditions, suitable prescription window, correct season, staffing and organization, safety considerations, etc.

D. Are processes in place to ensure all internal and external notifications and media releases will be completed?

E. Have key agency staffs been fully briefed about the implementation of this prescribed fire?

F. Are there circumstances that could affect the successful implementation of the plan?

Such as preparedness level restrictions, resource availability, other prescribed fire or wildfire activity

G. Have you communicated your expectations to the Burn Boss and FMO regarding if and when you are to be notified that contingency actions are being taken?

H. Have you communicated your expectations to the Burn Boss and FMO regarding decisions to declare the prescribed fire a wildfire?

(b) (6), (b) (7)(C)

Implementation Recommended by:

FMO or Prescribed Fire Burn Boss Signature:

Date: 12-1-20

I am authorizing ignition of this prescribed fire between the dates of 12/2/20 and 12/31/20. It is my expectation that the project will be implemented within this time frame and as discussed and documented and attached to this plan. If the conditions we discussed change during this time frame, it is my expectation you will brief me on the circumstances and an updated authorization will be negotiated if necessary.

Additional Instructions or Discussion Documentation attached (Optional): Yes No

(b) (6), (b) (7)(C)

Ignition Authorized by:

Agency Administrator Signature and Title:

Date: 12/1/20

Prescribed Fire Name: District Wide Piles Rx

Ignition Unit Name: Pino West

Element 2A: Agency Administrator Ignition Authorization

Instructions: The Agency Administrator Ignition Authorization must be completed before a prescribed fire can be implemented. If ignition of the prescribed fire is not initiated prior to expiration date determined by the agency administrator, a new authorization will be required.

Prior to signature the agency administrator should discuss the following key items with the fire management officer (FMO) or burn boss. Attach any additional instructions or discussion documentation (optional) to this document.

Key Discussion Items

A. Has anything changed since the Prescribed Fire Plan was approved or revalidated?

Such as drought or other climate indicators of increased risk, insect activity, new subdivisions/structures, smoke requirements, Complexity Analysis Rating. **No**

B. Have compliance requirements and pre-burn considerations been completed?

Such as preparation work, NEPA mitigation requirements, cultural, threatened and endangered species, smoke permits, state burn permits/authorizations. **Yes**

C. Can all of the elements and conditions specified in Prescribed Fire Plan be met?

Such as weather, scheduling, smoke management conditions, suitable prescription window, correct season, staffing and organization, safety considerations, etc. **Yes**

D. Are processes in place to ensure all internal and external notifications and media releases will be completed? **Yes**

E. Have key agency staffs been fully briefed about the implementation of this prescribed fire? **Yes**

F. Are there circumstances that could affect the successful implementation of the plan?

Such as preparedness level restrictions, resource availability, other prescribed fire or wildfire activity. **No**

G. Have you communicated your expectations to the Burn Boss and FMO regarding if and when you are to be notified that contingency actions are being taken? **Yes**

H. Have you communicated your expectations to the Burn Boss and FMO regarding decisions to declare the prescribed fire a wildfire? **Yes**

(b) (6), (b) (7)(C)

Implementation Recommended by:

FMO or Prescribed Fire Burn Boss Signature:

Date: 1-19-22

I am authorizing ignition of this prescribed fire between the dates of 1-19-22 and 2-1-22. It is my expectation that the project will be implemented within this time frame and as discussed and documented and attached to this plan. If the conditions we discussed change during this time frame, it is my expectation you will brief me on the circumstances and an updated authorization will be negotiated if necessary.

Additional Instructions or Discussion Documentation attached (Optional): Yes No

(b) (6), (b) (7)(C)

Ignition Authorized by:

Agency Administrator Signature and Title:

Date: 1/19/2022

Prescribed Fire Name: Jemez District Wide Piles Rx

Ignition Unit Name: Pino West

Element 2A: Agency Administrator Ignition Authorization

Instructions: The Agency Administrator Ignition Authorization must be completed before a prescribed fire can be implemented. If ignition of the prescribed fire is not initiated prior to expiration date determined by the agency administrator, a new authorization will be required.

Prior to signature the agency administrator should discuss the following key items with the fire management officer (FMO) or Prescribed Fire Burn Boss (RXB). Attach any additional instructions or discussion documentation (optional) to this document.

Key Discussion Items

A. Has anything changed since the Prescribed Fire Plan was approved or revalidated?	<i>No</i>
	<i>Such as drought or other climate indicators of increased risk, insect activity, new subdivisions/structures, smoke requirements, Complexity Analysis Rating.</i>
B. Have compliance requirements and pre-burn considerations been completed?	<i>Yes</i>
	<i>Such as preparation work, NEPA mitigation requirements, cultural, threatened, and endangered species, smoke permits, state burn permits/authorizations.</i>
C. Can all of the elements and conditions specified in Prescribed Fire Plan be met?	<i>Yes</i>
	<i>Such as weather, scheduling, smoke management conditions, suitable prescription window, correct season, staffing, and organization, safety considerations, etc.</i>
D. Are processes in place to ensure all internal and external notifications and media releases will be completed?	<i>Yes</i>
E. Have key agency staffs been fully briefed about the implementation of this prescribed fire?	<i>Yes</i>
F. Are there circumstances that could affect the successful implementation of the plan?	
	<i>Such as preparedness level restrictions, resource availability, other prescribed fire, or wildfire activity</i>
G. Have you communicated your expectations to the Burn Boss and FMO regarding if and when you are to be notified that contingency actions are being taken?	<i>Yes</i>
H. Have you communicated your expectations to the Burn Boss and FMO regarding decisions to declare the prescribed fire a wildfire?	<i>Yes</i>

Implementation
FMO or RXB: **(b) (6), (b) (7)(C)**

Date: 2/15/2022

I am authorizing ignition of this prescribed fire between the dates of 2/16/2022 and 3/15/2022. It is my expectation that the project will be implemented within this time frame and as discussed and documented and attached to this plan. If the conditions we discussed change during this time frame, it is my expectation you will brief me on the circumstances and an updated authorization will be negotiated if necessary.

Additional Instructions or Discussion Documentation attached (Optional): Yes No

Ignition Authorized by:

Agency Administrator Signature and Title:

(b) (6), (b) (7)(C)

District Ranger Date: 2/15/22

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple

Element 2A: Agency Administrator Ignition Authorization

Instructions: The Agency Administrator Ignition Authorization must be completed before a prescribed fire can be implemented. If ignition of the prescribed fire is not initiated prior to expiration date determined by the agency administrator, a new authorization will be required.

Prior to signature the agency administrator should discuss the following key items with the fire management officer (FMO) or burn boss. Attach any additional instructions or discussion documentation (optional) to this document.

Key Discussion Items

- A. Has anything changed since the Prescribed Fire Plan was approved or revalidated?

Such as drought or other climate indicators of increased risk, insect activity, new subdivisions/structures, smoke requirements, Complexity Analysis Rating.

- B. Have compliance requirements and pre-burn considerations been completed?

Such as preparation work, NEPA mitigation requirements, cultural, threatened and endangered species, smoke permits, state burn permits/authorizations.

- C. Can all of the elements and conditions specified in Prescribed Fire Plan be met?

Such as weather, scheduling, smoke management conditions, suitable prescription window, correct season, staffing and organization, safety considerations, etc.

- D. Are processes in place to ensure all internal and external notifications and media releases will be completed?

- E. Have key agency staffs been fully briefed about the implementation of this prescribed fire?

- F. Are there circumstances that could affect the successful implementation of the plan?

Such as preparedness level restrictions, resource availability, other prescribed fire or wildfire activity

- G. Have you communicated your expectations to the Burn Boss and FMO regarding if and when you are to be notified that contingency actions are being taken?

- H. Have you communicated your expectations to the Burn Boss and FMO regarding decisions to declare the prescribed fire a wildfire?

Implementation Recommended by:

FMO or Prescribed Fire Burn Boss Signature: _____ Date: _____

I am authorizing ignition of this prescribed fire between the dates of _____ and _____. It is my expectation that the project will be implemented within this time frame and as discussed and documented and attached to this plan. If the conditions we discussed change during this time frame, it is my expectation you will brief me on the circumstances and an updated authorization will be negotiated if necessary.

Additional Instructions or Discussion Documentation attached (Optional): Yes No

Ignition Authorized by:

Agency Administrator Signature and Title: _____ Date: _____

Prescribed Fire Name: Jemez District Wide Piles RxIgnition Unit Name: Pino West**Element 2B: Prescribed Fire Go/No-Go Checklist**

Preliminary Questions	Circle YES or NO
A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? If <u>NO</u> proceed with the Go/NO-GO Checklist below, if <u>YES</u> go to item B.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary? If <u>YES</u> , proceed with checklist below. If <u>NO</u> , STOP: Implementation is not allowed. An amendment is needed.	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Have ALL the required notifications been made?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Have ALL required current and projected fire weather forecast been obtained and are they favorable?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Are ALL prescription parameters met?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Are ALL smoke management specifications met?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Are ALL planned operations personnel and equipment on-site, available and operational?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Has the availability of contingency resources applicable to today's implementation been checked and are they available?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
If all the questions were answered " <u>YES</u> " proceed with a test fire. Document the current conditions, location and results. If any questions were answered " <u>NO</u> ", DO NOT proceed with the test fire: Implementation is not allowed.	
After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed fire plan and will it meet the planned objective? Circle: YES or NO	

(b) (6), (b) (7)(C)

Burn Boss Signatu

Date:

1-19-22

Prescribed Fire Name: Jemez District Wide Piles RxIgnition Unit Name: Pino West**Element 2B: Prescribed Fire Go/No-Go Checklist**

Preliminary Questions	Circle YES or NO
<p>A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development?</p> <p>If <u>NO</u> proceed with the Go/NO-GO Checklist below, if <u>YES</u> go to item B.</p>	<input checked="" type="radio"/> YES <input type="radio"/> NO
<p>B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary?</p> <p>If <u>YES</u>, proceed with checklist below.</p> <p>If <u>NO</u>, STOP: Implementation is not allowed. An amendment is needed.</p>	<input checked="" type="radio"/> YES <input type="radio"/> NO
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Have ALL the required notifications been made?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Have ALL required current and projected fire weather forecast been obtained and are they favorable?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Are ALL prescription parameters met?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Are ALL smoke management specifications met?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Are ALL planned operations personnel and equipment on-site, available and operational?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Has the availability of contingency resources applicable to today's implementation been checked and are they available?	<input checked="" type="radio"/> YES <input type="radio"/> NO
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	<input checked="" type="radio"/> YES <input type="radio"/> NO
<p>If all the questions were answered "<u>YES</u>" proceed with a test fire. Document the current conditions, location and results. If any questions were answered "<u>NO</u>", DO NOT proceed with the test fire: Implementation is not allowed.</p>	
<p>After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed fire plan and will it meet the planned objective? Circle: <input checked="" type="radio"/> YES or NO</p>	

(b) (6), (b) (7)(C)

Burn Boss Signature:

Date: 1-20-2022

Prescribed Fire Name: District Wide Pile BurnIgnition Unit Name: Pino West Piles Rx**Element 2B: Prescribed Fire Go/No-Go Checklist**

Preliminary Questions	Circle YES or NO
<p>A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? If <u>NO</u> proceed with the Go/NO-GO Checklist below, if <u>YES</u> go to item B.</p>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<p>B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary? If <u>YES</u>, proceed with checklist below. If <u>NO</u>, STOP: Implementation is not allowed. An amendment is needed.</p>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL the required notifications been made?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL required current and projected fire weather forecast been obtained and are they favorable?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are ALL prescription parameters met?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are ALL smoke management specifications met?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are ALL planned operations personnel and equipment on-site, available and operational?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Has the availability of contingency resources applicable to today's implementation been checked and are they available?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<p>If all the questions were answered "<u>YES</u>" proceed with a test fire. Document the current conditions, location and results. If any questions were answered "<u>NO</u>", DO NOT proceed with the test fire: Implementation is not allowed.</p>	
<p>After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed fire objective? Circle: <input checked="" type="checkbox"/> YES or NO</p> <p>(b) (6), (b) (7)(C)</p>	

Burn Boss Sign:

Date: FEB 1ST 2022

Prescribed Fire Name: District Wide Pile Burn

Ignition Unit Name: Pino West Piles Rx

Element 2B: Prescribed Fire Go/No-Go Checklist

Preliminary Questions	Circle YES or NO
A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? If <u>NO</u> proceed with the Go/NO-GO Checklist below, if <u>YES</u> go to item B.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary? If <u>YES</u> , proceed with checklist below. If <u>NO</u> , STOP: Implementation is not allowed. An amendment is needed.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL the required notifications been made?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL required current and projected fire weather forecast been obtained and are they favorable?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are ALL prescription parameters met?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are ALL smoke management specifications met?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Are ALL planned operations personnel and equipment on-site, available and operational?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Has the availability of contingency resources applicable to today's implementation been checked and are they available?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

If all the questions were answered "YES" proceed with a test fire. Document the current conditions, location and results. If any questions were answered "NO", DO NOT proceed with the test fire: Implementation is not allowed.

After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed fire objective? (b) (6), (b) (7)(C) Circle: YES or NO

Burn Boss Sign:

Date: 2-10-22

Prescribed Fire Name: District Wide Pile Burn

Ignition Unit Name: Pino West Piles Rx

Element 2B: Prescribed Fire Go/No-Go Checklist

Preliminary Questions	Circle YES or NO
A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? If <u>NO</u> proceed with the Go/NO-GO Checklist below, if <u>YES</u> go to item B.	YES <input checked="" type="radio"/> NO <input type="radio"/>
B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary? If <u>YES</u> , proceed with checklist below. If <u>NO</u> , STOP: Implementation is not allowed. An amendment is needed.	YES <input checked="" type="radio"/> NO <input type="radio"/>
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Have ALL the required notifications been made?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Have ALL required current and projected fire weather forecast been obtained and are they favorable?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Are ALL prescription parameters met?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Are ALL smoke management specifications met?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Are ALL planned operations personnel and equipment on-site, available and operational?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Has the availability of contingency resources applicable to today's implementation been checked and are they available?	YES <input checked="" type="radio"/> NO <input type="radio"/>
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	YES <input checked="" type="radio"/> NO <input type="radio"/>

If all the questions were answered "YES" proceed with a test fire. Document the current conditions, location and results. If any questions were answered "NO", DO NOT proceed with the test fire: Implementation is not allowed.

After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed (b) (6), (b) (7)(C)ed objective? Circle: YES or NO

Burn Boss Sign

Date: 2-19-22

00119

Prescribed Fire Name: District Wide Burn _____Ignition Unit Name: Multiple**Element 2B: Prescribed Fire Go/No-Go Checklist**

Preliminary Questions	Circle YES or NO
A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? If <u>NO</u> proceed with the Go/NO-GO Checklist below, if <u>YES</u> go to item B.	YES NO
B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary? If <u>YES</u> , proceed with checklist below. If <u>NO</u> , STOP: Implementation is not allowed. An amendment is needed.	YES NO
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	YES NO
Have ALL the required notifications been made?	YES NO
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	YES NO
Have ALL required current and projected fire weather forecast been obtained and are they favorable?	YES NO
Are ALL prescription parameters met?	YES NO
Are ALL smoke management specifications met?	YES NO
Are ALL planned operations personnel and equipment on-site, available and operational?	YES NO
Has the availability of contingency resources applicable to today's implementation been checked and are they available?	YES NO
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	YES NO
If all the questions were answered " <u>YES</u> " proceed with a test fire. Document the current conditions, location and results. If any questions were answered " <u>NO</u> ", DO NOT proceed with the test fire: Implementation is not allowed.	
After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed fire plan and will it meet the planned objective? Circle: YES or NO	

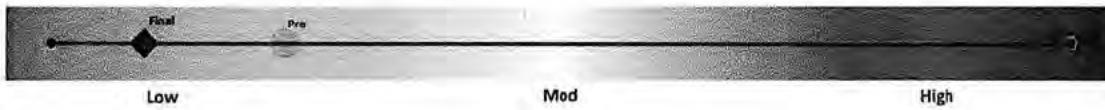
Burn Boss Signature: _____ Date: _____


NWCG Prescribed Fire Summary and Final Complexity Worksheet (PMS 424-1)

This worksheet is supplemental to the *Prescribed Fire Complexity Rating System Guide* (PMS 424). It is designed to enable effective risk management. The *Interagency Prescribed Fire Planning and Implementation Procedures Guide* (PMS 484) provides further explanation. This becomes Element 3 of the prescribed fire plan.

Type the Prescribed Fire Plan name here		Quantity	Significance
Values	On-Site	Few	Mod
	Off-Site	Multiple	Low
	Public/Political Interest	Few	High

Element	Preliminary Risk	Post-Plan Risk	Technical Difficulty	Calculated Rating
Safety	Low	Low	Low	Low
Fire Behavior		Low	Low	Low
Resistance to Containment		Low	Low	Low
Ignition Procedures and Methods	Low	Low	Low	Low
Prescribed Fire Duration	Low	Low	Low	Low
Smoke Management			Low	
Number and Dependence of Activities	Low	Low	Low	Low
Management Organization	Low	Low	Low	Low
Treatment/Resource Objectives		Low	Low	Low
Constraints	Low	Low	Low	Low
Project Logistics			Low	

Calculated Summary Prescribed Fire Plan Complexity


Final Complexity Determination	Final Complexity Determination Rationale
Low	Preparer- By requiring snow to be present during burning operations, greatly reduces the potential for unforeseen fire activity, and nullifies the ROS. This leaves the burnboss only smoke considerations and limited logistical concerns to mitigate. Combining that with a minimum staffing of Three personnel and the rating for the complexity of this burn plan is LOW.

Signatures	Rx Burn Plan Preparer's Name: (b) (6), (b) (7)(C)	Date: 9/26/19
	Technical Reviewer's Name: (b) (6), (b) (7)(C)	Date: 10/17/19 Technical Reviewer
	Agency Administrator's Name: (b) (6), (b) (7)(C)	Date: 11/15/2019

Prescribed Fire Name: District Wide Burn _____Ignition Unit Name: Multiple

Fill out Elements 4 through 21 based on the guidance provided in the *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484.

Element 4: Description of Prescribed Fire Area

A. Physical Description: This Jemez District-Wide Pile Burn Plan is a single document which defines and authorizes multiple pile burning sites. The piles addressed in this burn plan are located throughout the Jemez District, Santa Fe National Forest and Valles Caldera National Preserve. All piles were created by hand or by machine as a result of hazardous fuel removal treatments, and vary moderately in size, shape, and composition.

1. Location:

2. Size

Project Area	Township	Range	Section	Acres
Thompson Ridge Piles	19N	3E	5	1
Archeological Site Thinning*	18N	2E	10,11,14,15,16,21,22	1415
	18N	3E	2,3,10,11	858
Pino West Task Order	18N	3E	14,15,16,21,22,23,26,27, & 28	765
Joaquin Piles	18N	1E	1,2,3,4,9,10,11,12,13,14,15,16,23 & 24	625
Vallecitos	18N	3E	14 & 15	45
East Fork Task Order	18N	3E	1,5 & 6	361
Falls Task Order	18N	3E	2,3,14,15	204
Falls Campground	18N	3E	2,3	113
Cat Mesa	18N	3E	8,17,18 & 19	523
San Diego WUI	18N	2E	1,2	90

* Archeological Site Thinning described above accounts for the entire treatment area where piles may be present. Specific pile locations will not be individually identified due to the sensitive nature of archeological site locations.

3. Topography:

Elevation: Top – 9800' Bottom – 7500'

Slope: 60% Maximum 0% Minimum

Aspect: All Aspects present

00122

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple

Drainage Name

Project Name	Drainage Name
Thompson Ridge Piles	Cave, Mushroom, & Water Canyons
Cat Mesa	San Diego canyon
00Archeological Site thinning	Varied locations throughout district
Pino West	San Juan Canyon
Joaquin	Rio Guadalupe
Vallecitos	East Fork
East Fork	East Fork
Falls	East Fork
Falls Campground	East Fork
San Diego WUI	San Diego Canyon

4. Project area:

Because of the great variety of geographic locations, it is not practical to delineate a single, unifying boundary which would encompass all pile project sites. The general boundary is the Jemez Ranger District of the Santa Fe National Forest. Any amendments will describe the added project area.

Ignition units:

Individual project maps will be added to the burn plan folder as projects are prioritized (See appendix A)

B. Vegetation/Fuels Description:

1. On-site fuels data:

The on-site fuels data for all projects within the Espanola district pile burning plan includes hand and/or machine piled slash consisting of variable diameters. This is the material the prescription is intended to burn under this plan. The adjacent fuels will cover surface fuel conditions surrounding piles themselves and pile burn projects.

Fuel Loading (per pile): A range of 50 cu/ft. - 200 cu/ft. per pile

2. Adjacent fuels data:

Fuel models 8, 9 and 10 appropriately cover the fuels adjacent to the piles themselves and the surrounding project areas. These models will be used in behave to calculate for any spot fire ignitions adjacent to the piles and the project area. This information will be filed in the appendices for empirical data in the burn folder.

3. Percent of vegetative type and fuels model(s):

Under the district wide pile burn plan, the aim is to burn activity fuel that has been piled either by hand or machine. Describing the exact percentages of vegetation types and fuel models throughout theses project areas is unpractical but it is important to note that the majority of the area where piles can be found are either in Ponderosa Pine and Mixed Conifer vegetation types represented as fuel model 9 and 8 respectively.

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple**Element 6: Funding****A. Cost: \$5 - \$50 per acre****B. Funding source: NFHF10 and/or CFLN06 funds****Element 7: Prescription****A. Prescription Narrative:**

1. Describe how fire behavior will meet objectives

Meeting resource and prescribed fire objectives for piling burning is relatively straight forward. Piles are individually lit and allowed to consume activity fuel within pile. Consumption over 80% is considered successful in meeting project objectives.

B. Prescription Parameters:

1. Environmental or fire behavior (or both).

Only two environmental prescription parameters exist for this pile burn plan. **1. Continuous snow coverage of the forest floor over the entire burn unit.** If continuous snow coverage is not present this burn plan is not applicable and a jackpot/broadcast burn plan must be utilized. The Burn Boss will monitor weather conditions for days following the day of ignitions to assure snow cover will persist until the burn is declared out.

- 2. Smoke dispersion will meet New Mexico Smoke Management Regulations.** The statewide waiver or individual waiver (if in place) may be utilized.

Pile Burn RX	Environmental Variables
Temperature	-30° to 50° F
Snow Presence	Continuous coverage of forest floor across entire unit
Mid Flame wind speed	0 – 16 mph
Wind Direction	Any
Smoke Dispersion	New Mexico Smoke Management Regulations will be followed. The statewide waiver or individual waiver (if in place) may be utilized.

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple**C. Description of Unique Features, Natural Resources, Values:**

Considering this a district wide pile burn plan, a variety of unique features are possible. A few unique features common to many burn plans and project areas are listed and described below.

- Archeological sites may be found in some project areas. If sites are located in the project area, clearance will be in place and their location will be communicated at briefing. In addition, some sites have been treated and material piled outside of the site boundaries
- Power line right-of-ways are common across the district and if burning near a right-of-way it may require some monitoring to prevent power poles from catching fire.
- Highways, forest roads and private property are common features when conducting any sort of prescribed fire and will be monitored for smoke impacts during pile burning activities.

Recreational Improved and unimproved sites and National Forest Trail Systems may be impacted by smoke

D. Maps-Attach in Appendix A

1. Vicinity (Required)
2. Project/Ignition Unit(s) (Required) See appendix A "Maps" in Burn Plan folder where all projects maps shall be located prior to implementation.
3. Values (Optional): Included Not Included
4. Significant or Sensitive Features (Optional): Included Not Included
5. Fuels or Fuel Model(s)(Optional): Included Not Included
6. Smoke Impact Area (Optional): Included Not Included

Element 5: Objectives**A. Resource objectives:**

- a. Manage for the return of fire to the ecosystem, favoring natural historic fire regimes while reducing the risk of high intensity stand replacing fires outside of the historic range of variability

B. Prescribed fire objectives:

- a. Provide for the safety and welfare of all personnel and the public while adhering to the CAF_SNF Fire COVID PLAN guidance to protect both on-site and off-site values.
- b. Minimize duration of smoke impacts to the surrounding area by adhering to guidelines established by New Mexico Air Quality Bureau while using tactics that minimize smoke impacts.
- c. Consume slash piles created by hand or machine by 90% with a tolerable deviation of 80% to 100%.

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple

Element 6: Funding

A. Cost: \$5 - \$50 per acre

B. Funding source: NFHF10 and/or CFLN06 funds

Element 7: Prescription

A. Prescription Narrative:

1. Describe how fire behavior will meet objectives

Meeting resource and prescribed fire objectives for piling burning is relatively straight forward. Piles are individually lit and allowed to consume activity fuel within pile. Consumption over 80% is considered successful in meeting project objectives.

B. Prescription Parameters:

1. Environmental or fire behavior (or both).

Only two environmental prescription parameters exist for this pile burn plan. **1. Continuous snow coverage of the forest floor over the entire burn unit.** If continuous snow coverage is not present this burn plan is not applicable and a jackpot/broadcast burn plan must be utilized. The Burn Boss will monitor weather conditions for days following the day of ignitions to assure snow cover will persist until the burn is declared out.

2. Smoke dispersion will meet New Mexico Smoke Management Regulations. The statewide waiver or individual waiver (if in place) may be utilized.

Pile Burn RX	Environmental Variables
Temperature	-30° to 50° F
Snow Presence	Continuous coverage of forest floor across entire unit
Mid Flame wind speed	0 – 16 mph
Wind Direction	Any
Smoke Dispersion	New Mexico Smoke Management Regulations will be followed. The statewide waiver or individual waiver (if in place) may be utilized.

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple

1. Fire Modeling or empirical documentation (or both)

The following are the outputs generated from the BEHAVE PLUS fire behavior modeling program. This burn plan is specific for pile burning so a fuel model 13 was utilized to best represent the conditions of the piles. **There is a requirement for continuous snow coverage under this burn plan and these behave runs represent what can be expected from flame lengths and BTUs of the piles themselves, not adjacent fuels.** Because of snow rate of spread is not applicable.

1hr Fuel Moisture	4
10hr Fuel Moisture	5
100hr Fuel Moisture	6
Live Fuel Moisture	150
20-ft Wind Speed	40 mph
Mid-Flame Windspeed	16 mph
Flame Length (In Feet)	21.8
Heat per Unit Area BTU/ft ²	3625
Fireline Intensities BTU/ft/s	4629

Element 8: Scheduling A. Implementation Schedule:

1. Ignition Time Frames or Season(s) (or both)
 - Whenever snow is consistently present on the ground.

B. Projected Duration:

- This burn plan covers pile burning on the entire district and will cover multiple years. Individual projects will be weather dependent and will take place within prescription parameters and may last for several days.

C. Constraints:

- Outside of parameters set by the environmental prescription.
- Adverse/inclement weather
- Lack of resources mandated by this plan
- Inadequate snow cover

Prescribed Fire Name: District Wide I BurnIgnition Unit Name: Multiple

Element 9: Pre-burn Considerations and Weather

A. Considerations:

1. On-site

- Ensure snow cover is adequate and conditions will inhibit spread of a sustained surface fire.
- Obtain current/expected forecast for appropriate weather zone
- Ensure all compliances are met, in regard to, wildlife and archeological resources.

2. Off-site

- Ensure all required notifications are made; this includes Forest PAO(two weeks prior Minimum), New Mexico Air Quality Bureau, Santa Fe Dispatch, and pre-established list of private citizens and businesses who may be impacted from a particular project.
- Consider providing the public with a forum to share concerns about prescribed fire implementation. Forum may consist of community meetings, contacting groups or individuals on call lists, conducting radio interviews, or providing contact information.
- Utilize national weather service to refine burn windows
- When burn units are adjacent to roadways or private residences, appropriate signage may be used. "Smoke Ahead", "Prescribed Burn Ahead" or signage of similar wording may be used along roadways and/or private residences.

B. Method and Frequency for Obtaining Weather and Smoke Management Forecast(s):

- Before planned ignition, extended weather forecasts from the National Weather Service will be viewed and taken into account for planning purposes.
- Spot WX forecasts may be requested for the day of ignition from the National Weather Service, after taking weather on the project site, or by using data collected by a Remote Automated Weather Station (RAWS) located on or near project site. If Spot WX Forecast is not used a Tabular forecast will be used to obtain ventilation category and weather predictions.
- Any additional spot WX forecasts will be requested at the discretion of the Burn Boss
- Any weather observations and spot forecasts will be documented and included in the project file.

C. Notifications:

The forest public affairs staff will be notified at least one week prior to a prescribed fire as to allow enough time to make proper notifications to the public and media. Contacts of local residents and businesses, fire departments and smoke sensitive individuals will be made 1-2 weeks prior to ignition. Registration with the New Mexico Air Quality Bureau (Smoke Management) will be completed at a minimum of two weeks prior to any planned ignition. Notification of implementation with Smoke Management personnel will take place 24 hours prior to beginning of ignitions and daily notification will occur if there is any cancellation of planned ignitions.

Prescribed Fire Name: District Wild : Burn

Ignition Unit Name: Multiple

Element 10: Briefing

A. Briefing Checklist; including, but not limited to: (additional items may be added)

- Burn organization and assignments
- Prescribed Fire objectives and prescription
- Description of prescribed fire project area
- Expected weather and fire behavior
- Communications
- Ignition plan
- Holding plan
- Contingency plan and assignments
- Wildfire declaration
- Safety and medical plan

After every daily briefing, it is mandatory that all personnel sign a sign in sheet to ensure they received the Job Hazard Analysis (JHA) and safety briefing, or they will not be allowed to participate in any burning activities

Element 11: Organization and Equipment

A. Positions:

- (1) RXB3
- (2) additional Rx Crew members

Minimum of 3 total persons

B. Equipment:

- Drip torches
- Gas/Diesel Mix
- Hand tools
- UTV's/ATV's

C. Supplies:

Personnel on burn required to provide their own food/water, and adequate protective clothing to mitigate the snow, rain and cold temperatures

Element 12: Communication

A. Radio Frequencies:

1. Command frequency(ies):

Prescribed Fire Name: District Wid BurnIgnition Unit Name: Multiple

Command	CH: 1	Santa Fe West RX 172.300 TX 172.300
Frequency(s):	CH: 2	Santa Fe WEST RPT RX 172.300 TX 165.0125 (Tone 5 = 103.5 Tesuque W Rpt)

2. Tactical frequency(ies):

	CH: 5	SFNF FIRE TAC RX 168.1250	TX 168.1250
Tactical Frequency(s):	CH: 10	R3 TAC 2 RX 168.6750	TX 168.6750

3. Air operations frequency(ies):

Air Operations Frequency(s):	CH: 13	Air to Ground 51 RX168.3125 TX168.3125
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B. Telephone Numbers:

Santa Fe N.F. Dispatch	505-438-5600
Santa Fe 24-hour number	505-438-5600
JEMEZ R.D.	575-829-3535
(b) (6), (b) (7)(C) (District Ranger)	575-829-3535
(b) (6), (b) (7)(C) (District FMO)	(b) (6), (b) (7)(C)
Vacant (District AFMO)	505-829-3535
(b) (6), (b) (7)(C) (Fire Staff)	(b) (6), (b) (7)(C)
(b) (6), (b) (7)(C) (Forest AFMO)	

A complete list of district numbers will be included in the briefing package

Prescribed Fire Name: District Wildland : BurnIgnition Unit Name: Multiple

Element 13: Public and Personnel Safety, Medical

A. Safety Hazards:

Safety hazards on this project include but are not limited to the following: footing, terrain, snags, wildlife, driving, weather, fire behavior, complacency, communication, hazards on private property, power lines and poles, and smoke. Also, pile burning typically occurs during a time of year when weather conditions are colder and higher chances of precipitation exist. This list does not include all hazards that could be present. Job Hazard Analysis (JHA's) will be presented prior to any ignitions to all project personnel. The JHA's will cover all the known hazards and any additional hazards found during implementation will be addressed by the Burn Boss. If immediate action is required to mitigate the hazard(s), the Burn Boss may cease ignitions to address the hazard.

B. Mitigation: Measures Taken to Reduce the Hazards:

Mitigation measures will be in place to reduce the risk of hazards. These measures are listed in complexity analysis and/or in the JHA. These measures will be in place prior to implementation and will be discussed during briefings. To aid in providing for the safety of the public and when necessary, signage shall be placed along roadways in which smoke has the potential to impact. In addition to posting signs, an updated press release will be sent out 1-2 weeks prior to implementation in order to advise smoke sensitive patients of activities to follow and allow ample time for these individuals to make necessary arrangements. Public news releases will be posted throughout the area and the local fire dept. will also be notified prior to ignitions. It will be the responsibility of firefighters to dress appropriately and be prepared for the potential weather conditions that may exist.

C. Emergency Medical Procedures:

If anyone gets injured on the burn site Burn Boss will be notified and all burning operations will stop until the injured individual has been attended to. All medical procedures will be with Santa Fe Dispatch. The burn boss and Santa Fe Dispatch will use the ICS 206 Medical Plan.

D. Emergency Evacuation Methods:

Minor injuries will be treated on scene using First Aid or the injured person will be transported to nearest medical facility. Major injuries will be reported to the Burn Boss. The Burn Boss will notify medical personnel (EMT's) if available to help injured person. If injury requires transportation or med-evac then the Burn Boss will notify the Santa Fe Dispatch Center and possibly local unit to obtain the appropriate resource.

E. Emergency Facilities:

Emergency facilities distance to burn location will vary by project. A medical plan (ICS 206) for each new project area will be included in the briefing packet and covered in the daily safety briefing prior to burning.

Element 14: Test Fire

A. Planned Location:

Prior to ignition, a test fire will be conducted. The test fire will be located within the unit where ignitions will commence. There is no size restriction or limitation to a test fire and initial ignitions may supplement an adequate test fire result if other requirements are met. The Burn Boss has overall discretion to where the test fire will take place. **There are two main requirements of a test fire.** 1. The test fire location will be in fuels represented in the entire burn unit. In this case, slash piles are the fuel to be burned and one or more piles being lit will suffice for representative fuels. 2. The second important criterion for a test fire is that it is controllable. The test must be in a location that is easy to suppress because if objectives are exceeded or not being met then a stopping point must be used to cease fire spread. Again, slash piles are the focus of this burn plan and if objectives are not being met they can be lined and ignitions ceased.

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple

On the first day of any prescribed fire project a test fire will be conducted. On projects that last multiple days, evaluation of day to day fire behavior may supplement a test fire as long as documentation is made to assure objectives are being met. If in doubt, then conduct an additional test fire and document results. However, successive test fires can be initiated at the discretion of the Burn Boss.

B. Test Fire Documentation:

1. Weather conditions on site: Spot weather forecast and weather readings for operational periods will be documented and saved in the Burn plan folder.
2. Test fire results: Test fire results including smoke dispersal and direction, and pile consumption will be documented and saved in the Burn plan folder.

Element 15: Ignition Plan

A. Firing Methods:

1. Techniques, sequences and patterns
 - Spot ignition in piles using drip torches will be the most common technique for ignition.
 - Ignition of piles will typically start on the windward side at the highest point of an individual burn unit, but all techniques, sequences and patterns will be left to the discretion of the burn boss.

B. Devices:

- Drip torches
- Fusees

B. Minimum Ignition Staffing:

- (1) RXB3
- (2) additional RXCM

Minimum of 3 total persons

Also, see element 11 for organizational structure and equipment needs and supplies.

Element 16: Holding Plan

A. General Procedures for Holding:

- Time of year and associated environmental conditions do not promote the possibility of an escape
- Because of required snow, holding will not be an issue.
- Upon completion of the operational period the Burn Boss will specify the requirements to vacate the area and determine patrol status and frequency.

Prescribed Fire Name: District Wide Burn _____

Ignition Unit Name: Multiple

B. Critical Holding Points and Actions:

- Holding resources may spend time "chunking" piles. "Chunking" refers to the practice of manually pushing unburned fuel back into the burning pile with either a tool or by hand. This method may be important in achieving objectives in regard to consumption of fuels within piles but is not required.
- Project areas near structures, private land and roadways may require additional monitoring as deemed necessary by the burn boss.

B. Minimum Organization or Capabilities Needed:

- (1) RXB3
- (2) additional RXCM

Minimum of 3 total persons

Also, see element 11 for organizational structure and equipment needs and supplies.

- Burn Boss may elect to use more resources than are listed here

Element 17: Contingency Plan

A. Management Action Points or Limits: (not utilized under the District-Wide pile burn plan)

Due to the multiple areas covered in the plan, and the variety of values and considerations associated with variations in the landscape no "Blanket" MAP's are included in this plan but rather project site specific trigger points set prior to implementation

Trigger Points

On a burn day, prior to ignition, trigger points will be set by the Burn boss and communicated to all personnel in the daily briefing.

The burn boss will give strong consideration for trigger points related to smoke impacts affecting roadways and/or communities.

B. Actions Needed:

1. Contingency Plan for Going Out of Prescription at Low End:

(**Low End** = Minimum Conditions for Pile Burning, i.e. excessive moisture and/or snowfall.)

It is unlikely that the low end of the prescription will be a limiting factor for burning piles. But if an excessive amount of moisture and/or snowfall is present, the piles may not be consumed to a desired effect and ignition may cease.

2. Contingency Plan for Going Out of Prescription at High End:

(**High End** = Maximum Conditions for Burning i.e. Low RH, Low Fuel Moisture, High Temperatures, Winds, etc.)

Snow presence is required under this burn plan and the environmental prescription parameter that may inhibit burning will be smoke dispersion.

C. Minimum Contingency Resources and Maximum Response Time(s):

If prescription parameters are exceeded or anticipated to be exceeded, the following contingency resources will be used to help keep the fire in-check until it is back in prescription. This must be accomplished within the next burning period (FSM 5140.31) in order to avoid conversion to "wildfire".

Prescribed Fire Name: District Wildland BurnIgnition Unit Name: Multiple

The minimum contingency resources needed to implement project is 1 Type 6 Engines or 3 red carded personnel. Only 1 type 6 engine is required for a contingency resource due to the requirement of snow to be present in order to implement this burn plan.

The maximum response time allowed for any contingency resource will be 12 hours. Resources were determined using local fire knowledge and production rates for an anticipated spot fire outside of the unit using behave plus when fire is at or outside of prescription on the high range. Dispatch will be contacted prior to implementation to ensure that the contingency resources are available.

The same contingency resource can be identified for multiple prescribed fire projects. When specific contingency resources are identified for more than one prescribed fire, the local fire management organization(s) must evaluate and document adequacy of all contingency resources within the area. This evaluation must consider:

- Local, current, and predicted fire danger
- Local and regional wildland fire activities.

Once a contingency resource is committed to a specific wildland fire action (wildfire or prescribed fire), it can no longer be considered a contingency resource for another prescribed fire project and a suitable replacement contingency resource must be identified or the ignition halted. The Agency Administrator will determine if and when they are to be notified that contingency actions are being taken. If the contingency actions are successful at bringing the project back within the scope of the Prescribed Fire Plan, the project may continue. If contingency actions are not successful by the end of the next burning period, then the prescribed fire will be converted to a wildfire.

Contingence Resources	Travel Time to Fire
Additional Type 6 Engines or larger	12 hours
Additional Forest personnel	12 hours

Element 18: Wildfire Declaration

A. Wildfire Declared By:

It is the responsibility of the Line Officer to declare a Wildfire based upon recommendation made by the burn boss. This determination will only be made if contingency actions have been implemented and have failed or are likely to fail and cannot be mitigated within the following burn period by a combination of on-site and contingency resources. Contingency resources will be ordered through Santa Fe Dispatch. The Burn boss can utilize contingency resources at any stage to assist with operations and are not strictly held to being utilized only if the high end is exceeded.

The designated Burn Boss can make the recommendation of wildfire conversion to the agency administrator when he/she determines that one or more of the following conditions or events have occurred, or is likely to occur, and cannot be mitigated within the next burning period by utilizing the mitigation/holding or contingency actions identified in the burn plan:

1. The prescribed fire leaves the approved burn project boundaries.
2. The fire behavior exceeds limits described in the prescribed fire plan.
3. The fire effects are unacceptable.

Prescribed Fire Name: District Wildland Burn

Ignition Unit Name: Multiple

After wildfire declaration, Managers will use a decision support process to guide and document wildfire management decisions. The process will provide situational assessment, analyze hazards and risk, define implementation actions, and document decisions and rational for those decisions.

B. IC Assignment:

In the event that a wildfire is declared, the Burn Boss will assume duties as IC or request an appropriate level IC onsite or through dispatch. The burn team and contingency resources will assume roles under a Type 4 incident organization. If the complexity of the wildfire warrants, a request for a higher organization will be made by the IC through Santa Fe Dispatch. It is also important to note that if a prescribed fire is converted to a wildfire; all personnel on the fireline must be pack-tested at the arduous level as this is not required for prescribed fire.

C. Notifications:

If a wildfire is declared, notification will immediately be made to Dispatch.

D. Extended Attack Actions and Opportunities to Aid in Fire Suppression (Optional):

If extended attack is necessary, logistical support needs will be coordinated through dispatch by the IC.

Remember: Prescribed burning activities require only a moderate level WCT; in the event of a conversion to a wildfire, any personnel without an arduous WCT rating shall be released from the incident.

Element 19: Smoke Management and Air Quality

A. Compliance:

- Under the regulations set by the New Mexico Air Quality Bureau (AQB), this project falls within the Smoke Management Program II (SMP II) category as stated in New Mexico Smoke Management Guidance Document – May 2005. Under a SMP II, there is an increase of requirements needed prior to implementation which includes registration, notification, tracking, monitoring, and other considerations (alternatives to burning, actions to minimize emissions, and evaluation of smoke dispersion).
- Under the requirements of SMP II, ignitions can only be completed when the ventilation category is good or better without a waiver. A statewide waiver is available to burn under poor or fair ventilation categories with restrictions on timing and acres treated daily.
- Additional public notification is required due to the proximity of the project to private property with dwellings. Public notification of implementation is required between no earlier than 30 days prior to two days prior to any ignitions.
- Registration with AQB is required no later than two weeks prior to any planned ignitions. Within the registration, documentation is needed to address considerations of alternatives to burning, project characteristics, and actions to minimize emissions.
- Notification with AQB is required no later than by 10:00 a.m. of the prior business day to the planned day of ignition. If the ignition is postponed and/or cancelled after notification is completed, cancellation is required to be completed by 10:00 a.m. the following day.

Prescribed Fire Name: District Wide BurnIgnition Unit Name: Multiple**B. Permits to be Obtained:**

- When burning under ventilation categories good or better, there are no permits or waivers to be obtained. If ignitions take place with a poor or fair ventilation category, a statewide waiver would apply. Also burning under an individual waiver approved by the state may be allowed under this burn plan.

C. Smoke-Sensitive Receptors:

This burn plan encompasses the entire Jemez Ranger District with potential smoke sensitive receptors all throughout the district. This includes but is not limited to communities, small towns, subdivisions, state and forest road systems and recreation areas. A few of these areas are listed below.

- Thompson Ridge Subdivision
- Sierra de Los Pinos Subdivision
- La Cueva
- Jemez Springs
- Seven Springs
- Sulphur Springs
- San Diego Canyon
- NM State Highways 126 and 4
- Forest Road 10
- Various Campgrounds in the area

D. Potential Impacted Areas:

Any impacted areas will be documented in a unit log (ICS-214). Photos will be taken, if possible, and kept in the Burn Plan file folder. Any of the smoke sensitive areas described in section C may potentially be areas impacted by smoke.

E. Mitigation Strategies and Techniques to Reduce Smoke Impacts:

1. Public notifications will be posted at least 1-2 weeks prior to ignition
2. Depending on smoke impacts, burn boss may attempt to finish ignition operation by 1500 hours to minimize residual smoke impacts.
3. Posting smoke signs on roadways where it may be necessary.
4. Pile "Chunking" may be used to ensure good clean consumption and reduce residual smoke.
5. Burning under GOOD or better ventilation categories when possible.
6. Monitor regional health care facilities capacity prior to burn implementation

Element 20: Monitoring**A. Fuels Information Required and Procedures:**

- This is a pile burn plan and requires presence of snow cover. Fuel moistures are not part of the environmental prescription and this data is not required under this burn plan.

B. Weather Monitoring (Forecasted and Observed) Required and Procedures:

- Any recorded weather observations will be included in the burn plan folder.
- Forecasted weather will be monitored the days preceding the burn

Prescribed Fire Name: District Wide Burn _____

Ignition Unit Name: Multiple

C. Fire Behavior Monitoring Required and Procedures:

- Visual monitoring will be used to assess fire behavior of piles.

D. Monitoring Required to Ensure that Prescribed Fire Plan Objectives are Met:

- Visual monitoring will be used to ensure desired consumption of slash piles.

E. Smoke Dispersal Monitoring Required and Procedures:

- Smoke dispersal/visual monitoring will be documented on the New Mexico Smoke Management Program Smoke Visual Monitoring Form or a form that is similar.

Element 21: Post-burn Activities

A. Post-Burn Activities that must be Completed:

Post-burn Activities that must be completed:

- Perform After Action Review after work is completed for the day.
- Adequate patrol, by fire red-carded personnel, to ensure that the burn does not escape the perimeter after ignition is completed
- Re-visit the pile burned units to establish if desired consumptions were met and project objectives achieved.

Prescribed Fire Name: District Wide Burn

Ignition Unit Name: Multiple

Prescribed Fire Plan Appendices

Appendix A: Maps: Vicinity, Project or Ignition Units (or both), Optional: Significant or Sensitive Features, Fuels or Fuel Model, Smoke Impact Areas

Appendix B: Technical Reviewer Checklist

Appendix C: Complexity Analysis

Appendix D: Agency-Specific Job Hazard Analysis or Risk Assessment

Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation

Appendix F: Smoke Management Plan and Smoke Modeling Documentation (Optional)

Type the Prescribed Fire Plan name here		Quantity	Significance	Values Description: Describe the identified off-site, on-site and political values
Values	On-Site	Few	Mod	On site values to consider for district wide pile burning are, personnel, Heritage sites, timber stand health, Forest System Recreational trails, and wildlife concerns.
	Off-Site	Multiple	Low	the same as above minus Personnel concerns
	Public/Political Interest	Few	High	Public/ Political interest values include, Roadway visibility issues, public Perception and Interest

Element	Preliminary Risk	Risk Rating Descriptors	Agency Administrator/ Prepared Discussion Completed
Safety	Low	<ul style="list-style-type: none"> • Safety issues and hazards are easily identifiable, addressed in briefings, and managed. • Minimal organization produces little exposure of personnel to hazards. • Adverse impacts to public health and safety are unlikely. • Activities are high frequency/low risk. • Fatigue and exposure to hazards are limited. • Standard safety briefings and attention to lookouts, Communications, Escape Routes, and Safety Zones (LCESS) are sufficient. <p>PPE, Communications, Snags, Hazard trees, foliage, environmental (insects, weather etc.), fuel mixing, general burning</p>	Yes
Fire Behavior		<ul style="list-style-type: none"> • Fuels vary within the unit, both in loading and arrangement. • Fire behavior may present control challenges that are easily mitigated. • Medium fuel loadings with some high concentrations are present. • Variable terrain features may significantly affect fire behavior and present moderate ignition and control problems. • Local winds and burning conditions may vary enough to cause shifts in fire behavior that briefly exceed modeled fire behavior and threaten controllability. • Periodic torching can be expected either as isolated points or in limited areas. • Probability of ignition outside of the unit is low, and any spotting is expected to be short ranges. <p>Steep slopes and varied fuel types, and loading exist within every unit</p>	Yes
Resistance to Containment		<ul style="list-style-type: none"> • Potential for multiple wildfire mechanisms such as spot fires or slopeovers that can propagate at moderate rates of spread but can be held by prompt holding actions. • Some fuel concentrations or ladder fuels exist near critical holding points. • Expected fire intensities in the primary fuel type create little potential to challenge standard fire lines. • The probability of ignition in fuels outside of control lines is low to moderate. • Some dependency on natural fuel breaks to hold the prescribed fire. • Local drought and/or fire indices are expected to be moderate to high. <p>Heavy fuel loading exists within all units due to mechanical treatments</p>	Yes
Ignition Procedures and Methods	Low	<ul style="list-style-type: none"> • An unexpected or adverse event is unlikely and coordination of firing sequence, pattern and timing is not critical to meet project objectives. • Specific fire intensity or rate of spread (ROS) are not critical for meeting resource objectives. <p>Pile Burning</p>	Yes
Prescribed Fire Duration	Low	<ul style="list-style-type: none"> • Ignition operations should be accomplished within one operational period. • Burn unit is small in size and residual burning is not expected after primary burn out of the unit. • Decrease in seasonal severity is expected. • Short time frame does not require special logistical support. • Mop-up is minimal or none is anticipated/planned. <p>When Pile burning, by definition, ignitions can be ceased by the direction of the burn boss</p>	Yes
Smoke Management		<ul style="list-style-type: none"> • Noticeable smoke will be produced creating at least some public concern. • Short-term health or safety concerns related to smoke exposure may occur if actual weather deviates from forecasted. • Nearby communities are highly conscious of smoke from wildland fire. • Some possibility for a NAAQS exceedance violation. • The prescription or ignition portions of the plan need to consider smoke management. <p>Smoke may be visible to multiple communities, and possibly create the need for signage along specific roadways impacted by drift smoke</p>	Yes
Number and Dependence of Activities	Low	<ul style="list-style-type: none"> • Activities are mostly independent from each other. • Coordination of activities is simple and straightforward. • The project does not involve another land management agency or jurisdiction. <p>Pile Burning requires a limited number of activities</p>	Yes
Management Organization	Low	<ul style="list-style-type: none"> • A small number of qualified people are required to implement the prescribed fire. • A single level of supervision is all that is needed (i.e. Burn Boss plus lighters and holders). 	Yes
Treatment/Resource Objectives		<ul style="list-style-type: none"> • Issues are present that hamper or may prevent meeting treatment/resource objectives. • Failure to meet objectives could have short-term adverse impacts. • Associated resources could be damaged if the prescribed fire did not meet resource objectives. • Few critical holding points. <p>Wildlife, Heritage and Recreational values may be at risk of adverse effects</p>	Yes

Element	Preliminary Risk	Risk Rating Descriptors	Agency Administrator/Preparer Discussion Completed
Constraints	Low	<ul style="list-style-type: none"> • Constraints exist with little impact on implementing the prescribed fire or achieving objectives. Adherence with National and State policies regarding Burn organization contingency resources and air quality (smoke) respectively 	Yes
Project Logistics		<ul style="list-style-type: none"> • Some phases of the prescribed fire may require logistical support in order to safely meet project objectives. • Limited amount of special equipment or communication equipment requiring more intensive logistical support may be needed to complete the project. Use of UTVs/ATVs may be required to shuttle personnel and Fuel. Fuel will need to be purchased by a Government purchase cardholder and have funds available. 	Yes

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Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX File Plan that Address Risk Mitigation
Safety	Low	Low	<ul style="list-style-type: none"> Safety issues and hazards are easily identifiable, addressed in briefings, and managed. Minimal organization produces little exposure of personnel to hazards. Adverse impacts to public health and safety are unlikely. Alerts are high frequency/low risk. Fatigue and exposure to hazards are limited. Standard safety briefings and attention to Lookouts, Communications, Escape Routes, and Safety Zones (CES) are sufficient. <p>Considering COVID-19 guidance regarding risk of exposure and mitigation, measures may be required aspect of briefings with an emphasis on screening, daily cleaning procedures, PPE, social distancing, and reducing smoke exposure. See the CAF_SNF Fire COVID PLAN for additional guidance.</p>	Elements 7,10,11-Daily safety briefings will be conducted and documented. Fires will be limited when snow is present with a small organization (min 3 persons).
Fire Behavior	Mod	Low	<ul style="list-style-type: none"> Terrain is relatively flat to the slope and aspects fire behavior, leading to a relatively unruly fire. Winds, fuel moisture, microclimate, and other fire conditions are relatively uniform and are not conducive to active fire spread. Fire behavior is highly predictable. Fire spread beyond the immediate ignition area(s) is not likely to occur or contribute to any control problem. 	Element 7-Snow being present will greatly reduce fire behavior.
Resistance to Containment	Mod	Low	<ul style="list-style-type: none"> Ranges from no potential to a likelihood of few mechanisms such as spot fires, blowovers or fire creeping, each comprising small areas that are readily detected, accessed, and controlled by holding resources available at the described fire. No ladder fuels or concentrations are near critical holding points. Ignition procedures do not create intense fire behavior. Probability of ignition on fuels outside the unit is low. Local drought and/or fire danger indices are expected to be low to moderate. 	Element 16-No containment issues are foreseen when burning piles in the snow.
Ignition Procedures and Methods	Low	Low	<ul style="list-style-type: none"> An unexpected or adverse event is unlikely and combination of firing sequence, patterns and timing is not critical to meet project objectives. Specific fire intensities or rate of spread (ROS) are not critical for meeting resource objectives. 	Element 13-Simple organization(min 3 persons) with no ROS due to presence of snow reduce the complexity of ignition operations.
Prescribed Fire Duration	Low	Low	<ul style="list-style-type: none"> Ignition operations should be accomplished within one operational period. Burn unit is small in size and residual burning is not reported after primary burn out of the unit. Decrease in seasonal severity is expected. Short time frame does not require special logistical support. Mop up is minimal or none is anticipated/planned. 	Element 14-Although multiple days may be required to complete individual units, burning when snow is present will reduce holding and logistical concerns.
Smoke Management	Mod	Mod	<ul style="list-style-type: none"> Noticeable smoke will be produced creating at least some public concern. Short term health or safety concerns related to smoke exposure may occur if actual weather deviates from forecasted. Neighboring communities are highly conscious of smoke from wildland fire. Some possibility for a HAAQS exceedance violation. The prescription or ignition portions of the plan need to consider smoke management. <p>All burning will comply with NM air quality regulations as stated in the SAPP or state wide waiver. Considering COVID-19 guidance, increased communication with the public may be required to address potential short-term health and safety concerns related to smoke exposure of surrounding communities. Additional emission reduction techniques (ERT) may be required to reduce smoke exposure to prescribed personnel and the public.</p>	Elements 9, 10-Smoke may be visible from multiple receptors/villages/towns. Smoke may temporarily impact roadside, requiring signage.
Number and Dependence of Activities	Low	Low	<ul style="list-style-type: none"> Activities are mostly independent from each other. Coordination of activities is simple and straightforward. The project does not involve another land management agency or jurisdiction. 	Elements 15,16-Organization requirements of the burn plan lead to minimal number of activities occurring concurrently.
Management Organization	Low	Low	<ul style="list-style-type: none"> A small number of qualified people are required to implement the prescribed fire. A single level of supervision is all that is needed (i.e. Burn Boss plus lighters and holders) 	Element 11-Minimum 3 personnel required by burn plan
Treatment/Resource Objectives	Mod	Low	<ul style="list-style-type: none"> Few if any issues are present that hamper meeting treatment/resource objectives. Few or no adverse impacts are expected if resource objectives are not met. No critical safety goals <p>Burning with known present greatly reduce adverse impacts to resources inside project areas.</p>	Elements 8,9,10

Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX Fire Plan that Address Risk Mitigation
Constraints	Low	Low	<ul style="list-style-type: none"> * Constraints exist with little impact on implementing the prescribed fire or achieving objectives. 	Elements 2,9,11 All burning will comply with Air quality regulations. All burning requires presence of snow.
Project Logistics	Mod	Mod	<ul style="list-style-type: none"> * Some phases of the prescribed fire may require logistical support in order to safely meet project objectives. * Limited amount of special equipment or communication equipment requiring more intensive logistical support may be needed to complete the project. Fuel must be purchased by a Government purchase cardholder and have funds available 	Element 11 - UTV's and/or ATV's may be used to shuttle personnel and fuel to and from project sites

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Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX Fire Plan that Address Risk Mitigation
Safety	Low	Low	<ul style="list-style-type: none"> • Safety issues and hazards are easily identifiable, addressed in briefings, and managed. • Minimal organization produces little exposure of personnel to hazards. • Adverse impacts to public health and safety are unlikely. • Activities are high frequency/low risk. • Fatigue and exposure to hazards are limited. • Standard safety briefings and attention to Lookouts, Communications, Escape Routes, and Safety Zones (LCEs) are sufficient. 	Elements 7,10,11- Daily safety briefings will be conducted and documented. Files will be burned when snow is present with a small organization (min 3 persons)
Fire Behavior		Low	<ul style="list-style-type: none"> • Terrain is mostly flat or the slope and aspect are uniform, leading to a relatively unvarying fire. • Winds, fuel moisture, microclimate, and other fire conditions are relatively uniform and are not conducive to active fire spread. • Fire behavior is highly predictable. • Fire spread beyond the immediate ignition areas is not likely to occur or contribute to any control problems. 	Element 7- Snow being present will greatly reduce fire behavior
Resistance to Containment		Low	<ul style="list-style-type: none"> • Ranges from no potential to a likelihood of few mechanisms such as spot fires, slopovers or fire creeping, each comprising small areas that are readily detected, accessed, and controlled by holding resources available on the prescribed fire. • No ladder fuels or concentrations are near critical holding points. • Ignition procedures do not create intense fire behavior. • Probability of ignition in fuels outside the unit is low. • Local drought and/or fire danger indices are expected to be low to moderate. 	Element 16- No containment issues are foreseen when burning piles in the snow.
Ignition Procedures and Methods	Low	Low	<ul style="list-style-type: none"> • An unexpected or adverse event is unlikely and coordination of firing sequence, patterns and timing is not critical to meet project objectives. • Specific fire intensities or rate of spread (ROS) are not critical for meeting resource objectives. 	Element 11- simple organization(min 3 persons), with no ROS due to presence of snow reduce the complexity of ignition operations
Prescribed Fire Duration	Low	Low	<ul style="list-style-type: none"> • Ignition operations should be accomplished within one operational period. • Burn unit is small in size and residual burning is not expected after primary burn out of the unit. • Decrease in seasonal severity is expected. • Short time frame does not require special logistical support. • Mop-up is minimal or none is anticipated/planned. 	Element 9- Although multiple days may be required to complete individual units, burning when snow is present will reduce holding and logistical concerns
Smoke Management			<ul style="list-style-type: none"> • Noticeable smoke will be produced creating at least some public concern. • Short-term health or safety concerns related to smoke exposure may occur if actual weather deviates from forecasted. • Nearby communities are highly conscious of smoke from wildland fire. • Some possibility for a NAAQS exceedance violation. • The prescription or ignition portions of the plan need to consider smoke management. <p>All burning will comply with NM air quality regulations as stated in the SMP II state wide waiver.</p>	Elements 9, 10- Smoke may be visible from multiple receptors/villages/towns. Smoke may temporarily impact roadways, requiring signage.
Number and Dependence of Activities	Low	Low	<ul style="list-style-type: none"> • Activities are mostly independent from each other. • Coordination of activities is simple and straightforward. • The project does not involve another land management agency or jurisdiction. 	Elements 15,16- Organization requirements of the burn plan lead to minimal number of activities occurring concurrently
Management Organization	Low	Low	<ul style="list-style-type: none"> • A small number of qualified people are required to implement the prescribed fire. • A single level of supervision is all that is needed (i.e. Burn Boss plus lighters and holders). 	Element 11- Minimum 3 personnel required by burn plan
			<ul style="list-style-type: none"> • Few if any issues are present that hamper meeting treatment/resource objectives. • Few or no adverse impacts are expected if resource objectives are not met. • No critical holding points. 	

Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX Fire Plan that Address Risk Mitigation
treatment/resource objectives		Low	burning with snow present greatly reduces adverse impacts to resources inside project areas	Elements 4,7,16

Element	Preliminary Risk	Post-plan Risk	Risk Rating Descriptors	Elements and Actions in the IRK Fire Plan that address Risk Mitigation
Constraints	Low	Low	* Constraints and with little impact on outcomes to the prescribed fire or achieve objectives.	Elements 5/6/1 all burns will comply with Air Quality regulation. All burns require presence of a monitor.
Project Logistics	Low	Low	* Some phases of the prescribed fire may require logistical support in order to safely meet project objectives. * Limited amount of specialized equipment or communication equipment required throughout the project. Fuel must be purchased by a Government purchase card holder and have funds available.	Statement 11 - UTR's and/or ATVs may be used to shuttle personnel and fuel to and from project sites.

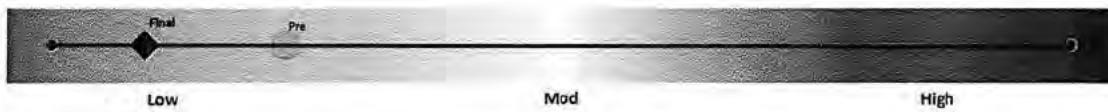
Element	Post-Plan Risk	Technical Difficulty	Rating Descriptors
Safety	Low	Low	<ul style="list-style-type: none"> • No special actions are required to mitigate potential minor accidents or injuries identified in the risk assessment/Job Hazard Analysis (JHA). • Safety concerns can be easily mitigated through CCS. • No preparation work or special project design features are required.
Fire Behavior	Low	Low	<ul style="list-style-type: none"> • Standard fire safety precautions are adequate to ensure personnel safety. • No fire behavior variations are expected and numerous barriers to fire spread exist. • The number, size or likelihood of spot fires and slopeovers is minimal and do not require additional suppression resources. • Fire behavior is such that holding forces can easily control possible spot fires and slopeovers using direct attack tactics. • No on-site operational fire behavior specialists are required.
Resistance to Containment	Low	Low	<ul style="list-style-type: none"> • Minimal holding resources are involved in the holding operation. • The burn unit and project area is easily accessible to the holding resources identified in the plan. • Minimal line width required to contain expected fire spread. • Minimal site prep is required.
Ignition Procedures and Methods	Low	Low	<ul style="list-style-type: none"> • There is no need for special firing equipment, techniques, or patterns. • Firing procedures are simple and ignition team is small. • Use of only one type of ignition device is planned. • The ignition pattern requires minimal supervision of the lighters to achieve project objectives and manage safety concerns. • Communications are easily maintained with a single tactical frequency. • The entire project area is readily visible to the Firing/Burn Boss.
Prescribed Fire Duration	Low	Low	<ul style="list-style-type: none"> • Ignition and mop-up operations are usually completed in 1 to 2 operational periods. • Mop-up and patrol is typical with minimal resource and equipment needs. • Standard press release is sufficient for public notification. <p>Little to no mop-up operations are anticipated</p>
Smoke Management		Low	<ul style="list-style-type: none"> • ERTs and SMTs are simple, routine and straightforward to achieve and will provide desirable smoke management outcomes. • Some limitations may be present in the plan. • Wind and dispersive parameters are not constrained. • No sensitive receptors exist. • Minimal coordination with air quality officials is required.
Number and Dependence of Activities	Low	Low	<ul style="list-style-type: none"> • Minimal difficulty in coordinating the required activities. • Holding and lighting are loosely dependent on each other. • Coordination problems or communication failures or issues will not affect the completion of the project. • No to very few pre-burn considerations are required.
Management Organization	Low	Low	<ul style="list-style-type: none"> • All team members are available within the local unit and are familiar with local factors affecting project implementation. • Several qualified personnel are available. • The operation is carried out employing a small burn crew. • There is no special pre-burn preparation organization is required.
Treatment/resource Objectives	Low	Low	<ul style="list-style-type: none"> • There are few resource objectives to meet. • Measures to achieve the objectives are easy to complete and there are few or no restrictions on techniques. • There are few or no restrictions on techniques and prescription parameters. • Basic monitoring of fire behavior and weather is needed to determine if prescribed fire objectives are being met. • Many other opportunities will exist to meet objectives in a given year. • Pre-burn site preparation is not required to meet resource objectives.
Constraints	Low	Low	<ul style="list-style-type: none"> • Constraints are easily accommodated and do not increase the difficulty of completing the project or achieving objectives. • Required weather and fuel conditions are locally very common.
Project Logistics		Low	<ul style="list-style-type: none"> • No specific logistic function is required and the local unit will handle their own support needs. • Project is nearby and easily accessible. • Local cache can supply the needs of the prescribed fire. <p>Although some project sites may not be easily accessible, Agency owned UTV's/ATVs aid in accessibility.</p>

**NWCG Prescribed Fire Summary and Final Complexity Worksheet (PMS 424-1)**

This worksheet is supplemental to the *Prescribed Fire Complexity Rating System Guide* (PMS 424). It is designed to enable effective risk management. The *Interagency Prescribed Fire Planning and Implementation Procedures Guide* (PMS 484) provides further explanation. This becomes Element 3 of the prescribed fire plan.

Type the Prescribed Fire Plan name here		Quantity	Significance
Values	On-Site	Few	Mod
	Off-Site	Multiple	Low
	Public/Political Interest	Few	High

Element	Preliminary Risk	Post-Plan Risk	Technical Difficulty	Calculated Rating
Safety	Low	Low	Low	Low
Fire Behavior		Low	Low	Low
Resistance to Containment		Low	Low	Low
Ignition Procedures and Methods	Low	Low	Low	Low
Prescribed Fire Duration	Low	Low	Low	Low
Smoke Management			Low	
Number and Dependence of Activities	Low	Low	Low	Low
Management Organization	Low	Low	Low	Low
Treatment/Resource Objectives		Low	Low	Low
Constraints	Low	Low	Low	Low
Project Logistics			Low	

Calculated Summary Prescribed Fire Plan Complexity

Final Complexity Determination	Final Complexity Determination Rationale
LOW	Preparer- By requiring snow to be present during burning operations, greatly reduces the potential for unforeseen fire activity, and nullifies the ROS. This leaves the burnboss only smoke considerations and limited logistical concerns to mitigate. Combining that with a minimum staffing of Three personnel and the rating for the complexity of this burn plan is LOW.

Signatures	Bx Burn Plan Preparer's Name: _____ X _____ Date: _____ Preparer
	Technical Reviewer's Name: _____ X _____ Date: _____ Technical Reviewer
	Agency Administrator's Name: _____ X _____ Date: _____ Agency Administrator

B. Prescription Parameters:

1. Environmental or fire behavior (or both). The below prescription parameters were used to calculate behave runs for adjacent fuels in the absence of snow cover. This burn plan **REQUIRES** presence of snow cover. Because of this the only required environmental prescription parameters of this burn plan will be presence of snow cover and meeting air quality regulations.

Pile Burn RX	Low Fire Intensity	High Fire Intensity
Temperature	NA	70
Relative Humidity (%)	NA	15
Mid Flame wind speed(mph)*	0	10(sustained for \geq 10 min.)
20 ft. Wind Speed(mph)	0	25
1-hr fuel moisture (%)	NA	9
10-hr fuel moisture (%)	NA	10
100-hr fuel moisture (%)	NA	11
1000-hr fuel moisture (%)	NA	NA
Live herbaceous moisture (%)	NA	100
Live woody moisture (%)	NA	100
Wind Direction	Any	Any
Smoke Dispersion	New Mexico Smoke Management Regulations will be followed. The statewide waiver or individual waiver (if in place) may be utilized.	

* Wind adjustment factor of .4 is used for partially sheltered fuels.

Additional inputs into the BEHAVE PLUS model:

Downwind Canopy Height (ft)	65
Fuel Shading from Sun (%)	50
Ridge to Valley Elevation Difference (ft)	800
Ridge to Valley Horizontal Difference (miles)	0.5

Spotting Source Location	Mid-Slope Windward side
Flame Height from a burning pile (ft)	20

2. Fire Modeling or empirical documentation (or both)

The following are the outputs generated from the BEHAVE PLUS fire behavior modeling program. This burn plan is specific for pile burning and the fuel models used account for fuels adjacent to the piles and project areas, **not the piles themselves**. There is a requirement for snow under this burn plan and these behave runs indicate the spread potential in the unlikely condition of snowmelt. Three separate fuel models were used to calculate fire behavior from spot fire ignitions or spread of fire from piles to adjacent fuels. Only the high fire intensity end of the prescription will be modeled for fire behavior as these burns are for piles and require presence of snow cover where no measurable fire spread would occur.

Fuel Model 8	High Fire Intensity
Rate of spread-Chains/hour	3.4
Flame Length (in feet)	1.3
Heat per Unit Area BTU/ft ²	169
Fireline Intensities BTU/ft./s	10
Spotting distance from a burning pile (in miles)	0.3
Probability of Ignition from a firebrand (%)	34
Fuel Model 9	High Fire Intensity
Rate of spread-Chains/hour	26.0
Flame Length (in feet)	4.6
Heat per Unit Area BTU/ft ²	335
Fireline Intensities BTU/ft./s	160
Spotting distance from a burning pile (in miles)	0.3
Probability of Ignition from a firebrand (%)	34
Fuel Model 10	High Fire Intensity
Rate of spread-Chains/hour	23.8
Flame Length (in feet)	8.0

Heat per Unit Area BTU/ft2	1180
Fireline IntensitiesBTU/ft/s	515
Spotting distance (in miles)	0.3
Probability of Ignition from a firebrand (%)	34

Prescribed Fire Name: Jewell RD - District wide Wildland Burn PlanIgnition Unit Name: Multifire**Appendix B: Technical Reviewer Checklist**

Fill out this checklist based on the guidance provided in the Technical Review section in the *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484.

Rate each element in the following table with an "S" for Satisfactory or "U" for Unsatisfactory. Use Comment field as needed to support the element rating.

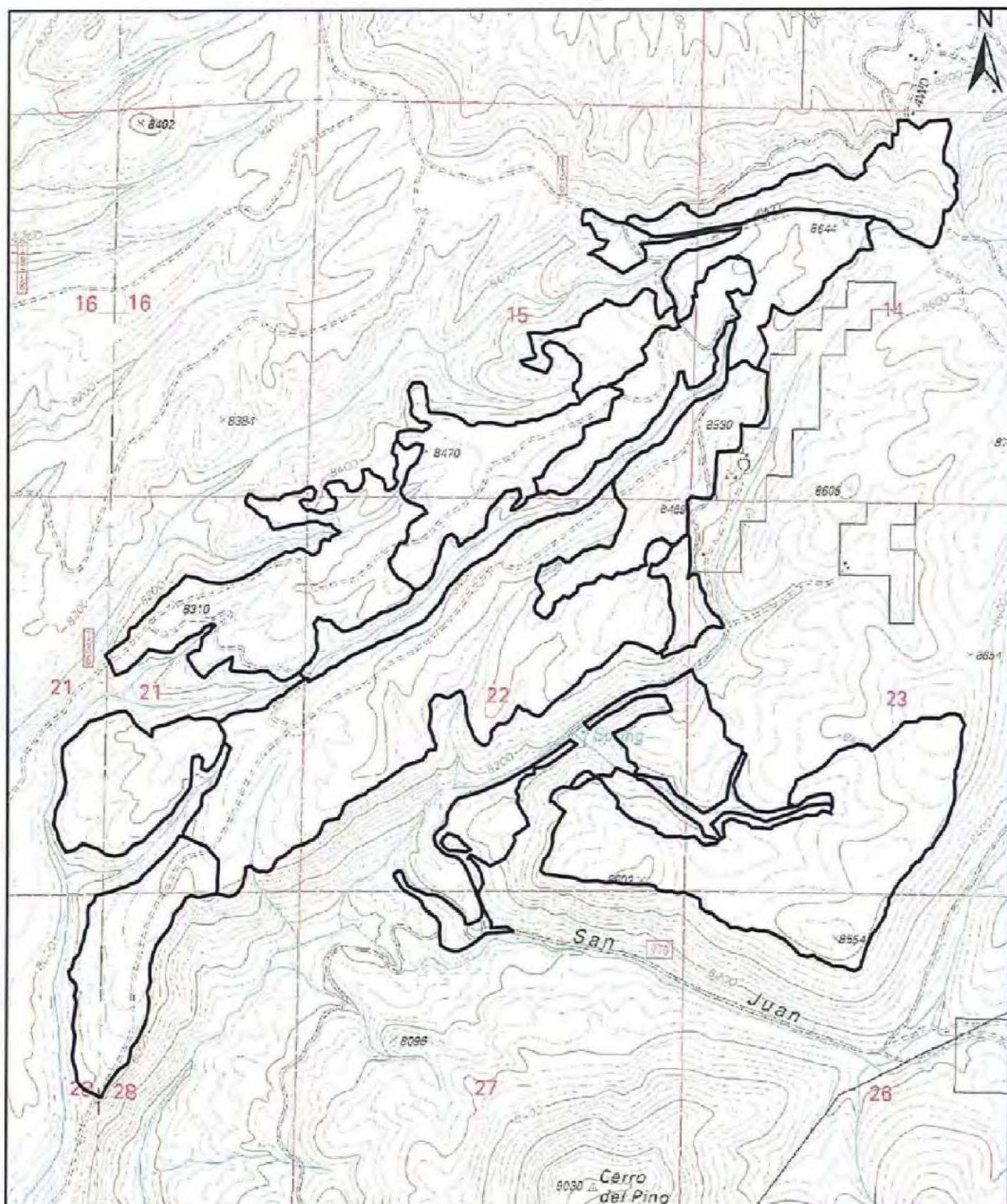
PRESCRIBED FIRE PLAN ELEMENTS	RATING	COMMENTS
1. Signature page	S/A	
2. A. Agency Administrator Ignition Authorization	N/A	
2. B. Prescribed Fire GO/NO-GO Checklist	N/A	
3. Complexity Analysis Summary	S	Type the name of burn planning! /
4. Description of Prescribed Fire Area	S	See edits on electronic document
5. Objectives	S	
6. Funding	S	
7. Prescription: Prescription Narrative and Prescription Parameters	S	
8. Scheduling	S	
9. Pre-Burn Considerations and Weather	S	See note on pg. 10
10. Briefing	S	
11. Organization and Equipment	S	
12. Communication	S	See note pg. 12
13. Public and Personnel Safety, Medical	S	
14. Test Fire	S	
15. Ignition Plan	S	
16. Holding Plan	S	
17. Contingency Plan	S	
18. Wildfire Declaration	S	See ed. 2 pg. 17
19. Smoke Management and Air Quality	S	
20. Monitoring	S	
21. Post-Burn Activities	S	
Appendix A: Maps	S	Include maps as units are identified.
Appendix C: Complexity Analysis	S	
Appendix D: Agency-Specific Job Hazard Analysis or Risk Assessment	S	
Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation	S	See note on pg. 9
Appendix F: Smoke Management Plan and Smoke Modeling Documentation (Optional)	N/A	
Other		

Approval is recommended subject to the completion of all requirements listed in the comments section, or on the Prescribed Fire Plan.

Recommendation for approval is not granted. Prescribed fire plan should be re-submitted for technical review subject to the completion of all requirements listed in the comments section, or on the Prescribed Fire Plan.

Technical Reviewer Signature: (b) (6), (b) (7)(C)Qualification and Currency: Rx D2 / 2 (2022)Date Signed: 10/17/19

Pino West T.O. Landing Piles Rx



0 0.25 0.5 1 Miles

PinoWest_Final - 1219 Acres



**NEW MEXICO
ENVIRONMENT DEPARTMENT**



Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico 87505
Phone (505) 476-4300 Fax (505) 476-4375
www.env.nm.gov

James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

**New Mexico
Smoke Management Program**

**COMBINED SMP I AND II STATEWIDE VENTILATION WAIVER
FOR BROADCAST AND PILE BURNS.**

The purpose of this waiver is to allow limited burning during times when ventilation is less than good under conditions that will minimize smoke impacts. This waiver for burning under fair or poor ventilation conditions is valid for all SMP I and SMP II burns registered in the State of New Mexico. Burners do not need to send a waiver request to use this waiver. This waiver may be rescinded or modified at any time by the Air Quality Bureau (AQB). The following conditions apply to this waiver.

Table 1: Conditions of This Waiver

Condition Category	Description of Condition
Planning and preparation	<ol style="list-style-type: none"> For burns planned under poor conditions, burner registration submitted to the AQB must indicate the prescribed wind directions under which the burn will be done. Burning shall be done only within the specified ranges of wind direction sent to the AQB in the burn registration. Notify local residents and visitors in advance of the planned burn. Copies or descriptions of all public notification documents used for the project shall be made available upon request for the AQB to inspect.
Tracking, monitoring, and reporting	<ol style="list-style-type: none"> Summarize ventilation index, daily burn accomplishments, hourly visual monitoring (plume characteristics such as height, direction smoke goes, color and thickness) and complaints received using the Daily Waiver Form provided by AQB. The completed Daily Waiver Form shall be faxed or emailed to AQB by 10:00 am on the day following the day you burned under a waiver. Instrument monitoring may be required on a case-by-case basis. For days when burning under the waiver is cancelled, a cancellation notification shall be sent to the AQB as soon as possible after the cancellation decision has been made.
Burning specifics	<ol style="list-style-type: none"> No burning (broadcast or pile) shall be done on Fridays, Saturdays, or Sundays if the ventilation is poor. Under poor conditions, if wind direction is toward residential areas, ignition shall be stopped as soon as it is safe to do so. For those pile burns less than five miles to a population, fire must be extinguished when crews leave the burn project site. For the purposes of this waiver, "extinguish" means the chunking and/or raking together of the pile as it burns to ensure a clean hot burn. The ventilation tables (Tables 2 and 3, below) describe ignition hours and maximum amount that is allowed to be burned with this waiver. For broadcast and pile burning, in order to reduce cumulative impacts of smoke, if the forecasted ventilation is less than 30,000 knot feet for 2 consecutive days, no burning shall be allowed.

Table 2: Ventilation Table for Broadcast Burns

Ventilation Categories	Ventilation Index (knot-feet)	Maximum Burn Area (acres/day)			Earliest start time*	Ignition shall stopped by*		
		Grass	Forest and Shrub					
			Maintenance	Restoration				
FAIR	40,000 – 59,999	Unlimited	Consult with AQB if ≥750 acres/day	Consult with AQB if ≥500 acres/day	sunrise	sunset		
POOR	30,000 - 39,999	500	200	100	9 AM	3 PM		
POOR	25,000 - 29,999	400	150	75	10 AM	3 PM		
POOR	20,000 - 24,999	300	100	50	11 AM	3 PM		

Table 3: Ventilation Table for Pile Burns

Ventilation Categories	Ventilation Index (knot-feet)	Maximum Burn Volume (cubic feet/hour)	Earliest start time*	Ignition shall be stopped by*
FAIR	40,000 – 59,999	Unlimited	sunrise	sunset
POOR	30,000 – 39,999	50,000	one hour after sunrise	one hour before sunset
POOR	25,000 – 29,999	30,000	9 AM	3 PM
POOR	20,000 – 24,999	20,000	9 AM	2 PM

*Start and end times are based on generally better ventilation times during the day. If different start and end times are desired, the burner should apply for an individual waiver.

Pino West Piles Rx

Prescribed Fire

Forecast Start Time: 2022-02-19 8:00 AM MST

Request Time: 2022-02-19 7:29 AM MST

Deliver Time: 2022-02-19 7:29 AM MST

Forecast Complete At: 2022-02-19 7:41 AM MST

Requested By: USFS

Contact(b) (6), (b) (7)(C)

Phone: [REDACTED]

Fax: [REDACTED]



Location Legal:

Lat/Lon: 35.7844 / -106.602

Quad:

Calculated: 35.7844 / -106.602

Elevation: 8200 - 8500

Drainage: San Juan Canyon

Aspect: All

Size: 25

Fuel Type: Timber (partial)

Observations

Site	Date	Elev	Wind	Temp	WB	RH	Td	Sky	Wx	Rmks
Site	02/19/22 0715	8350		17				Clear		

[Submit New Observation](#)

Requested Parameters

Remarks

- X X X Sky/Weather
- X X X Temperature
- X X X Humidity
- X X X Chance of Precipitation
- X X X Wind (20 FT)
- X X X Mixing Height
- X X X Transport Winds
- X X X Ventilation Rate

Forecast:

Spot Forecast for Pino West Piles Rx...USFS
National Weather Service Albuquerque NM
741 AM MST Sat Feb 19 2022

If conditions become unrepresentative, contact the National Weather Service.

.DISCUSSION...

Sunny and a little warmer today. Light winds will result in generally poor ventilation today, but an hour or two of fair vent rates will be possible during the mid afternoon hours. The warming trend will continue on Sunday with high temperatures around 5 degrees warmer than today. However, westerly breezes will return as well during the afternoon hours. This will allow for increased ventilation on Sunday. Wind speeds will increase further on Monday.

.REST OF TODAY...

Sky/weather.....Sunny.
Chance of Pcpn.....0 percent.
Max Temperature.....41-45.
Min Humidity.....23-27 percent.
20 Foot Winds.....Light winds becoming southwest 5 to 6 mph in
the afternoon.
Mixing Height.....4000 ft AGL.
Transport winds.....West 10 knots.
Max Vent Rate.....Fair/40000 knot-ft at 1400 local.
Ventilation Trend...Poor/8790 knot-ft around mid morning and
fair/40000 knot-ft by mid afternoon.

.TONIGHT...

Sky/weather.....Mostly clear.
Chance of Pcpn.....0 percent.
Min Temperature.....22-26.
Max Humidity.....42-46 percent.
20 Foot Winds.....Northwest winds 5 to 7 mph.
Ventilation Trend...Poor/10500 knot-ft by early evening and poor/0
knot-ft by late evening.

.SUNDAY...

Sky/weather.....Mostly sunny.
Chance of Pcpn.....0 percent.
Max Temperature.....47-51.
Min Humidity.....16-20 percent.
20 Foot Winds.....West winds 7 to 10 mph. A few gusts near
15 to 17 mph in the afternoon.
Mixing Height.....5000 ft AGL.
Transport winds.....West 18 knots.
Max Vent Rate.....Good/90000 knot-ft at 1400 local.
Ventilation Trend...Poor/25586 knot-ft around mid morning and
good/90000 knot-ft by mid afternoon.

\$\$

Forecaster...34
Requested by... (b) (6), (b) (7)(C)
Type of request...PRESCRIBED
.TAG 2203627.0/ABQ
.DELDT 02/19/22
.FormatterVersion 2.0.0

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Silver Spring, MD 20910
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National Weather Service Forecast Office

Albuquerque, NM

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Name:

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Go

Point Forecast: 5 Miles ENE Jemez Springs NM
35.79N 106.6W (Elev. 8399 ft)

Last Update: 4:50 am MST Feb 19, 2022

Tabular Forecast

Weather Elements		Weather/Precipitation												Fire Weather														
<input checked="" type="checkbox"/> Temperature (°F)		<input checked="" type="checkbox"/> Rain		<input checked="" type="checkbox"/> Thunder		<input checked="" type="checkbox"/> Snow		<input checked="" type="checkbox"/> Freezing Rain		<input checked="" type="checkbox"/> Sleet		<input type="checkbox"/> Fog		<input checked="" type="checkbox"/> Mixing Height x100ft		<input type="checkbox"/> Haines Index		<input type="checkbox"/> Lightning Activity Level		<input checked="" type="checkbox"/> Trans. Wind mph		<input checked="" type="checkbox"/> 20ft Wind mph		<input checked="" type="checkbox"/> Vent Rate (x1000 mph-ft)		<input checked="" type="checkbox"/> Dispersion Index		<input type="checkbox"/> Red Flag Threat Index
<input checked="" type="checkbox"/> Dewpoint (°F)																												
<input checked="" type="checkbox"/> Wind Chill (°F)																												
<input type="checkbox"/> Surface Wind mph																												
<input checked="" type="checkbox"/> Sky Cover (%)																												
<input checked="" type="checkbox"/> Precipitation Potential (%)																												
<input checked="" type="checkbox"/> Relative Humidity (%)																												

48-Hour Period Starting: 7am Sat, Feb 19 2022 ▾ Submit

Back 2 Days Forward 2 Days

Date	02/19																								02/20																								
Hour (MST)	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06																									
Temperature (°F)	16	21	28	34	37	42	43	43	41	39	38	32	28	27	26	27	26	25	25	25	25	25	24																										
Dewpoint (°F)	9	10	10	11	11	11	10	9	9	8	7	7	7	7	7	7	7	7	6	6	5	5	5																										
Wind Chill (°F)	11	16	24	31	35	36	40	39	37	34	32	26	21	21	20	20	19	18	17	17	17	16	15																										
Surface Wind (mph)	3	3	3	3	3	5	6	7	7	7	7	7	6	6	6	6	6	6	7	7	8	8																											
Wind Dir Gust	E	SE	SE	SE	S	SW	SW	SW	W	W	W	W	W	NW																																			
Sky Cover (%)	17	16	16	16	2	2	3	3	3	7	7	7	7	7	8	6	6	9	9	9	20	20																											
Precipitation Potential (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																										
Relative Humidity (%)	73	62	48	37	33	27	25	25	25	27	28	34	40	42	41	43	43	43	43	44	42	42	43																										
Rain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Thunder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Snow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Freezing Rain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Sleet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Mixing Height (x100ft)	5	10	20	30	35	40	40	35	25	15	10	5																																					
Transport Wind (mph)	1	1	2	5	7	9	12	13	12	10	8	6	5	3	3	3	3	5	5	5	6	6	6																										
Transport Wind Dir	N	NE	N	W	SW	SW	SW	W	W	W	W	W	NW																																				
20ft Wind (mph)	3	2	3	3	5	5	6	6	6	6	7	8	5	3	3	5	5	5	5	5	6	6	6																										
20ft Wind Dir	NW	NW	W	SW	SW	SW	SW	SW	W	W	NW	NW	W	W	W	NW																																	
Ventilation Rate (x1000 mph-ft)	0	1	2	10	21	32	48	52	42	25	12	6	3	0	0	0	0	0	0	0	0	0	0																										
Dispersion Index																																																	
Date	02/21																																																
Hour (MST)	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06																									
Temperature (°F)	24	29	35	40	44	47	48	49	48	46	42	39	35	32	30	30	29	29	28	27	26	25	25																										
Dewpoint (°F)	6	6	7	8	8	8	7	7	6	6	9	9	9	8	8	7	7	8	8	8	8	7	7																										
Wind Chill (°F)	16	21	27	34	39	42	44	44	42	40	35	30	25	22	20	19	19	18	17	15	14	13	13																										
Surface Wind (mph)	8	8	9	9	9	10	10	11	13	13	15	14	14	14	14	14	14	14	14	14	14	14	14																										
Wind Dir Gust	NW	NW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W																										
Sky Cover (%)	20	20	20	20	11	11	11	11	11	30	30	30	30	30	38	38	38	38	38	38	38	38	72	72																									
Precipitation Potential (%)	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	2	2																											
Relative Humidity (%)	44	38	31	26	23	20	18	18	18	19	25	29	33	37	38	38	38	40	42	44	46	47	47																										
Rain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Thunder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Snow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Freezing Rain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Sleet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																										
Mixing Height	5	10	25	35	45	50	45	40	25	15	5	5																																					

(x100ft)																						
Transport Wind (mph)	5	6	8	13	16	20	22	23	21	16	13	10	8	7	7	7	8	8	8	9	10	
Transport Wind Dir	NW	NW	NW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	
20ft Wind (mph)	7	7	7	7	7	8	9	10	12	13	14	14	14	14	14	14	14	14	13	12	9	7
20ft Wind Dir	NW	NW	NW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	
Ventilation Rate (x1000 mph-ft)	0	3	8	33	56	90	110	104	84	40	20	5	4	0	0	0	0	0	0	0	0	
Dispersion Index																						

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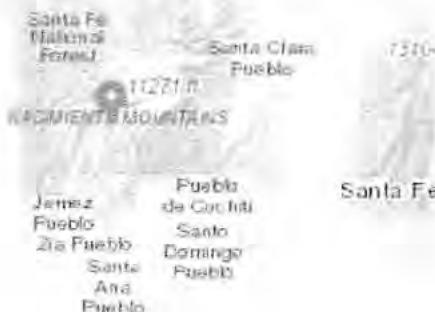
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Pino West Piles Rx

Prescribed Fire

Forecast Start Time: 2022-02-10 10:00 AM MST
Request Time: 2022-02-10 9:33 AM MST
Deliver Time: 2022-02-10 9:33 AM MST
Forecast Complete At: 2022-02-10 9:40 AM MST

Requested By: USFS
Contact(b) (6), (b) (7)(C)
Phone:
Fax:



100

Location Legal:
Lat/Lon: 35.7795 / -106.605
Quad:
Calculated: 35.7795 / -106.605

Elevation: 8200 - 8500
Drainage: San Juan
Aspect: SW
Size: 50
Fuel Type: Timber (partial)

Requested Parameters

Remarks

X X X Sky/Weather
X X X Temperature
X X X Humidity
X X X Chance of Precipitation
X X X Wind (20 FT)
X X X Mixing Height
X X X Transport Winds
X X X Ventilation Rate

Forecast:

Spot Forecast for Pino West Piles Rx...USFS
National Weather Service Albuquerque NM
939 AM MST Thu Feb 10 2022

If conditions become unrepresentative, contact the National Weather Service.

.DISCUSSION...
A stable atmosphere will provide poor ventilation through Friday with mostly light winds.

REST OF TODAY...

Sky/weather.....Mostly sunny.
Chance of Pcpn.....0 percent.
Max Temperature.....46-50.

00161



National Weather Service Forecast Office

Albuquerque, NM

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30

Point Forecast: 4 Miles ENE Jemez Springs NM
35.79N 106.62W (Elev. 8209 ft)

Last Update: 3:07 am MST Feb 10, 2022

Tabular Forecast

BEST OF 2010

[hide menu]	XML	
Weather Elements	Weather/Precipitation	Fire Weather
<input checked="" type="checkbox"/> Temperature (°F) <input checked="" type="checkbox"/> Dewpoint (°F) <input checked="" type="checkbox"/> Wind Chill (°F) <input checked="" type="checkbox"/> Surface Wind mph ▾ <input checked="" type="checkbox"/> Sky Cover (%) <input checked="" type="checkbox"/> Precipitation Potential (%) <input checked="" type="checkbox"/> Relative Humidity (%)	<input checked="" type="checkbox"/> Rain <input checked="" type="checkbox"/> Thunder <input checked="" type="checkbox"/> Snow <input checked="" type="checkbox"/> Freezing Rain <input checked="" type="checkbox"/> Sleet <input type="checkbox"/> Fog	<input checked="" type="checkbox"/> Mixing Height x100ft ▾ <input type="checkbox"/> Haines Index <input type="checkbox"/> Lightning Activity Level <input checked="" type="checkbox"/> Trans. Wind mph ▾ <input checked="" type="checkbox"/> 20ft Wind mph ▾ <input checked="" type="checkbox"/> Vent Rate (x1000 mph-ft) <input checked="" type="checkbox"/> Dispersion Index <input type="checkbox"/> Red Flag Threat Index

48-Hour Period Starting: 9am Thu, Feb 10 2022 ▾ Submit

Submit

Back 2 Days

Forward 2 Days

Data	02/12																								
	Hour (MST)	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08
Temperature (°F)	38	44	48	50	52	51	49	46	42	38	34	31	29	28	27	26	25	24	23	21	20	19	18	20	
Dewpoint (°F)	16	16	17	18	19	20	19	19	19	19	19	19	18	17	16	15	15	14	14	13	13	13	12	12	
Wind Chill (°F)	32	41	46	48				46	43	39	35	31	31	26	24	22	21	19	18	16	15	13	14	13	20
Surface Wind (mph)	8	6	5	6	7	7	7	6	5	3	3	2	3	3	5	5	5	5	5	5	5	3	3	2	
Wind Dir.	N	N	N	NW	W	W	W	W	NW	NW	N	N	NE	SE	SE	SE	S	SE	E	E	E	NE	NE		
Gust																									
Sky Cover (%)	30	30	17	17	17	17	17	17	17	33	33	33	33	33	33	35	35	35	35	35	35	73	73	73	
Precipitation Potential (%)	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	13	13	13	13	13	13	7	7	7	
Relative Humidity (%)	40	32	29	27	27	28	30	34	39	46	53	60	62	62	62	63	64	66	69	71	74	76	76	71	
Rain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Thunder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Snow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Freezing Rain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Sleet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Mixing Height (x100ft)	5	15	20	25	30	30	25	15	5															10	
Transport Wind (mph)	6	7	7	7	7	7	6	5	3	3	5	5	5	5	3	3	3	5	5	5	5	5	3	00162	

Pino West Piles Rx

Prescribed Fire

Forecast Start Time: 2022-02-01 8:00 AM MST

Request Time: 2022-02-01 7:38 AM MST

Deliver Time: 2022-02-01 7:38 AM MST

Forecast Complete At: 2022-02-01 8:17 AM MST

Requested By: USFS

Contact(b) (6), (b) (7)(C)

Phone:

Fax:



Location Legal:

Lat/Lon: 35.7755 / -106.591

Quad:

Calculated: 35.7755 / -106.591

Elevation: 8250 - 8500

Drainage:

Aspect:

Size:

Fuel Type:

Observations

Site	Date	Elev	Wind	Temp	WB	RH	Td	Sky	Wx	Rmks
No observations available										

[Submit New Observation](#)

Requested Parameters

Remarks

- X X X Sky/Weather
- X X X Temperature
- X X X Humidity
- X X X Chance of Precipitation
- X X X Wind (20 FT)
- X X X Mixing Height
- X X X Transport Winds
- X X X Ventilation Rate

Forecast:

Spot Forecast for Pino West Piles Rx...USFS
National Weather Service Albuquerque NM
817 AM MST Tue Feb 1 2022

If conditions become unrepresentative, contact the National Weather Service.

.DISCUSSION...

A winter storm will produce 10-16 inches of snow tonight through Wednesday night. Light snow may linger on Thursday and Thursday night with little or no additional accumulation. Dry weather is then expected through the weekend. Poor ventilation and very cold temperatures are expected with temperatures well below normal Wednesday through the weekend.

.TODAY...



National Weather Service Forecast Office

Albuquerque, NM

weather.gov

Name _____

四

Branche

Sample Size

ANSWER

3

Point Forecast: 5 Miles E Jemez Springs NM
35.79N 106.6W (Elev. 8399 ft)

Last Update: 4:18 am MST Jan 20, 2022

Tabular Forecast

Update: 4:18 am MST Jan 20, 2022

Weather Elements		
Weather/Precipitation		
Fire Weather		
<input checked="" type="checkbox"/> Temperature (°F)	<input checked="" type="checkbox"/> Rain	<input checked="" type="checkbox"/> Mixing Height x100ft ▾
<input checked="" type="checkbox"/> Dewpoint (°F)	<input checked="" type="checkbox"/> Thunder	<input type="checkbox"/> Haines Index
<input checked="" type="checkbox"/> Wind Chill (°F)	<input checked="" type="checkbox"/> Snow	<input type="checkbox"/> Lightning Activity Level
<input checked="" type="checkbox"/> Surface Wind mph ▾	<input checked="" type="checkbox"/> Freezing Rain	<input checked="" type="checkbox"/> Trans. Wind mph ▾
<input checked="" type="checkbox"/> Sky Cover (%)	<input checked="" type="checkbox"/> Sleet	<input checked="" type="checkbox"/> 20ft Wind mph ▾
<input checked="" type="checkbox"/> Precipitation Potential (%)	<input type="checkbox"/> Fog	<input checked="" type="checkbox"/> Vent Rate (x1000 mph-ft)
<input checked="" type="checkbox"/> Relative Humidity (%)		<input checked="" type="checkbox"/> Dispersion Index
		<input type="checkbox"/> Red Flag Threat Index

48-Hour Period Starting: 7am Thu, Jan 20 2022

Submit

Back 2 Days

Forward 2 Days

2/1/22, 8:27 AM

NWS Spot Forecast

Sky/weather.....Mostly cloudy.
 Chance of Pcpn.....10 percent.
 Max Temperature.....40-43.
 Min Humidity.....25-28 percent.
 20 Foot Winds.....Light winds becoming southwest 5 mph in the afternoon.
 Mixing Height.....3500 ft AGL.
 Transport winds....West 7 knots.
 Max Vent Rate.....Poor/24500 knot-ft at 1400 local.
 Ventilation Trend...Poor/6948 knot-ft around mid morning and poor/24500 knot-ft by mid afternoon.

.TONIGHT...

Sky/weather.....Cloudy. Chance of snow in the evening, then snow likely overnight.
 Chance of Pcpn.....70 percent.
 Min Temperature.....21-24.
 Max Humidity.....83-86 percent.
 20 Foot Winds.....South winds 5 mph.
 Ventilation Trend...Poor/12000 knot-ft by early evening and poor/1685 knot-ft by late evening.

.WEDNESDAY...

Sky/weather.....Cloudy. Snow.
 Chance of Pcpn.....90 percent.
 Max Temperature.....25-28.
 Min Humidity.....69-72 percent.
 20 Foot Winds.....South winds 6 mph.
 Mixing Height.....1500 ft AGL.
 Transport winds....Southeast 11 knots.
 Max Vent Rate.....Poor/15919 knot-ft at 1300 local.
 Ventilation Trend...Poor/8711 knot-ft around mid morning and poor/15000 knot-ft by mid afternoon.

\$\$

Forecaster...44

Requested by... (b) (6), (b) (7)(C)

Type of request...PRESCRIBED

.TAG 2201943.0/ABQ

.DELDT 02/01/22

.FormatterVersion 2.0.0

Please Provide Feedback:

[Send Feedback](#)

2/1/22, 8:27 AM

NWS Spot Forecast

Silver Spring, MD 20910
Page Author: NWS Internet Services Team
Web Master: w-nws.webmaster@noaa.gov

Page last modified: 20-Jul-2020 1:02 PM UTC

Pino West Piles Rx

Prescribed Fire

Forecast Start Time: 2022-01-20 9:00 AM MST

Request Time: 2022-01-20 7:30 AM MST

Deliver Time: 2022-01-20 7:30 AM MST

Forecast Complete At: 2022-01-20 7:40 AM MST

Requested By: USFS

Contact(b) (6), (b) (7)(C)

Phone:

Fax:



Location Legal:

Lat/Lon: 35.7771 / -106.615

Quad:

Calculated: 35.7771 / -106.615

Elevation: 8600 - 8300

Drainage: San Juan Canyon

Aspect: E

Size: 300

Fuel Type: Slash Piles (partial)

Observations

Site	Date	Elev	Wind	Temp	WB	RH	Td	Sky	Wx	Rmks
Site	01/20/22 0715	8400	999	19						
Site	01/20/22 0700	8400		19						
site	01/20/22 0700	8400		19						
Site	01/19/22 0745	8400		24						

[Submit New Observation](#)

Requested Parameters

Remarks

- X X X Sky/Weather
- X X X Temperature
- X X X Humidity
- X X X Chance of Precipitation
- X X X Wind (20 FT)
- X X X Mixing Height
- X X X Transport Winds
- X X X Ventilation Rate

Forecast:

Spot Forecast for Pino West Piles Rx...USFS
National Weather Service Albuquerque NM
739 AM MST Thu Jan 20 2022

If conditions become unrepresentative, contact the National Weather Service.

.DISCUSSION...

Despite clearing skies this afternoon, temperatures trend down with highs today below normal. Quieter conditions are expected through most of Friday with dry conditions and light winds. Another storm system arrives by Friday evening which may result in light snow starting Friday evening. Poor ventilation rates continue.

00167

1/20/22, 7:44 AM

NWS Spot Forecast

National Weather Service
1325 East West Highway
Silver Spring, MD 20910
Page Author: NWS Internet Services Team
Web Master: w-nws.webmaster@noaa.gov

Page last modified: 20-Jul-2020 1:02 PM UTC

Pino West Piles Rx

Prescribed Fire

Forecast Start Time: 2022-01-19 9:00 AM MST

Request Time: 2022-01-19 7:58 AM MST

Deliver Time: 2022-01-19 7:58 AM MST

Forecast Complete At: 2022-01-19 8:07 AM MST

Requested By: USFS

Contact(b) (6), (b) (7)(C)

Phone:

Fax:



Location Legal:

Lat/Lon: 35.7771 / -106.615

Quad:

Calculated: 35.7771 / -106.615

Elevation: 8600 - 8300

Drainage: San Juan Canyon

Aspect: E

Size: 300

Fuel Type: Slash Piles (partial)

Observations										
Site	Date	Elev	Wind	Temp	WB	RH	Td	Sky	Wx	Rmks
Site	01/19/22 0745	8400		24						

[Submit New Observation](#)

Requested Parameters

Remarks

- X X X Sky/Weather
- X X X Temperature
- X X X Humidity
- X X X Chance of Precipitation
- X X X Wind (20 FT)
- X X X Mixing Height
- X X X Transport Winds
- X X X Ventilation Rate

Forecast:

Spot Forecast for Pino West Piles Rx...USFS
National Weather Service Albuquerque NM
807 AM MST Wed Jan 19 2022

If conditions become unrepresentative, contact the National Weather Service.

.DISCUSSION...

Another storm system arrives late this afternoon, bringing additional chances for light snow through the overnight hours. Little to no accumulation is expected. Snow tapers off early Thursday morning, leading to quieter conditions until late Friday. Poor ventilation rates continue.

.REST OF TODAY...

Sky/weather.....Mostly sunny then becoming mostly cloudy.

00170



National Weather Service Forecast Office

Albuquerque, NM



Hemza

Next

Organization

Search for

© NWS/National Weather Service

Go

Point Forecast: 4 Miles ENE Jemez Springs NM
35.79N 106.52W (Elev. 8209 ft)

Last Update: 4:52 am MST Feb 1, 2022

Tabular Forecast

Last Update: 4:52 am MST Feb 1, 2022

Weather Elements		
Weather/Precipitation		
Fire Weather		
<input checked="" type="checkbox"/> Temperature ("F)	<input checked="" type="checkbox"/> Rain	<input checked="" type="checkbox"/> Mixing Height x100ft ▾
<input checked="" type="checkbox"/> Dewpoint ("F)	<input checked="" type="checkbox"/> Thunder	<input type="checkbox"/> Haines Index
<input checked="" type="checkbox"/> Wind Chill ("F)	<input checked="" type="checkbox"/> Snow	<input type="checkbox"/> Lightning Activity Level
<input checked="" type="checkbox"/> Surface Wind mph ▾	<input checked="" type="checkbox"/> Freezing Rain	<input checked="" type="checkbox"/> Trans. Wind mph ▾
<input checked="" type="checkbox"/> Sky Cover (%)	<input checked="" type="checkbox"/> Sleet	<input checked="" type="checkbox"/> 20ft Wind mph ▾
<input checked="" type="checkbox"/> Precipitation Potential (%)	<input type="checkbox"/> Fog	<input checked="" type="checkbox"/> Vent Rate (x1000 mph-ft)
<input checked="" type="checkbox"/> Relative Humidity (%)		<input checked="" type="checkbox"/> Dispersion Index
		<input type="checkbox"/> Red Flag Threat Index

48-Hour Period Starting: 7am Tue, Feb 1 2022 ▾

Submit

Back 2 Days

Forward 2 Days

1/19/22, 8:34 AM

NWS Spot Forecast

Silver Spring, MD 20910
Page Author: NWS Internet Services Team
Web Master: w-nws.webmaster@noaa.gov

Page last modified: 20-Jul-2020 1:02 PM UTC

Pino West Piles Rx

Prescribed Fire

Forecast Start Time: 2022-02-01 8:00 AM MST

Request Time: 2022-02-01 7:38 AM MST

Deliver Time: 2022-02-01 7:38 AM MST

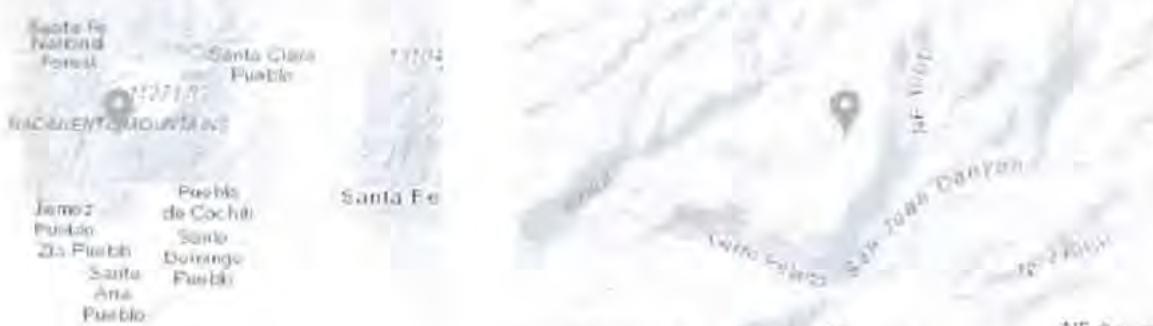
Forecast Complete At: 2022-02-01 8:17 AM MST

Requested By: USFS

Contact: (b) (6), (b) (7)(C)

Phone:

Fax:


Location Legal:

Lat/Lon: 35.7755 / -106.591

Quad:

Calculated: 35.7755 / -106.591

Elevation: 8250 - 8500

Drainage:

Aspect:

Size:

Fuel Type:

Observations

Site	Date	Elev	Wind	Temp	WB	RH	Td	Sky	Wx	Rmks
------	------	------	------	------	----	----	----	-----	----	------

No observations available.

[Submit New Observation](#)**Requested Parameters****Remarks**

- X X X Sky/Weather
- X X X Temperature
- X X X Humidity
- X X X Chance of Precipitation
- X X X Wind (20 FT)
- X X X Mixing Height
- X X X Transport Winds
- X X X Ventilation Rate

Forecast:

Spot Forecast for Pino West Piles Rx...USFS
 National Weather Service Albuquerque NM
 817 AM MST Tue Feb 1 2022

If conditions become unrepresentative, contact the National Weather Service.

.DISCUSSION...

A winter storm will produce 10-16 inches of snow tonight through Wednesday night. Light snow may linger on Thursday and Thursday night with little or no additional accumulation. Dry weather is then expected through the weekend. Poor ventilation and very cold temperatures are expected with temperatures well below normal Wednesday through the weekend.

.TODAY...

00173

2/1/22, 8:27 AM

NWS Spot Forecast

Sky/weather.....Mostly cloudy.
Chance of Pcpn.....10 percent.
Max Temperature.....40-43.
Min Humidity.....25-28 percent.
20 Foot Winds.....Light winds becoming southwest 5 mph in the afternoon.
Mixing Height.....3500 ft AGL.
Transport winds.....West 7 knots.
Max Vent Rate.....Poor/24500 knot-ft at 1400 local.
Ventilation Trend...Poor/6948 knot-ft around mid morning and poor/24500 knot-ft by mid afternoon.

.TONIGHT...

Sky/weather.....Cloudy. Chance of snow in the evening, then snow likely overnight.
Chance of Pcpn.....70 percent.
Min Temperature.....21-24.
Max Humidity.....83-86 percent.
20 Foot Winds.....South winds 5 mph.
Ventilation Trend...Poor/12000 knot-ft by early evening and poor/1685 knot-ft by late evening.

.WEDNESDAY...

Sky/weather.....Cloudy. Snow.
Chance of Pcpn.....90 percent.
Max Temperature.....25-28.
Min Humidity.....69-72 percent.
20 Foot Winds.....South winds 6 mph.
Mixing Height.....1500 ft AGL.
Transport winds.....Southeast 11 knots.
Max Vent Rate.....Poor/15919 knot-ft at 1300 local.
Ventilation Trend...Poor/8711 knot-ft around mid morning and poor/15000 knot-ft by mid afternoon.

\$\$

Forecaster...44

Requested by... (b) (6), (b) (7)(C)

Type of request...PRESCRIBED

.TAG 2201943.0/ABQ

.DELDT 02/01/22

.FormatterVersion 2.0.0

Please Provide Feedback:

[Send Feedback](#)

[Printer Friendly Version of Forecast](#) [Latest Forecast](#)

[Back to Forecast Monitor](#) [Copy Info to Spot Request for a New Incident](#) [Request Forecast Update](#)

WildCAD Incident Card - Santa Fe Interagency Dispatch Center: SNF 2022-17
"Pino West Piles Rx" Prescribed Fire 01/19/2022 08:02:51 Order Number: NM-SNF-000017
Area 18 (JEMEZ)

Reporting Party: BAT 10-3

Initial Report On Conditions:

Jemez RD plans to begin burning Pino West logging slash piles 300 ac

Initial Location: FR 10 and FR 269 San Juan Mesa

Lat: 35°,47',4.09", Lon: 106°,36',19.08", T18N, R3E, NWNE Sec 22

Actual Location:

Lat: 35°,47',4.09", Lon: 106°,36',19.08"

Incident Notes:

Owner: USFS

Dispatcher: (b) (6), (b) (7)(C) **Status:** Open

Fiscal Codes: WFSE1022 (0319)

Web Comment:

Resource Details:

DIV 10-3:

Committed at 01/20/2022 09:22:01, Released at 01/20/2022 15:35:59, Committed at 02/19/2022 08:54:12, Released at 02/19/2022 13:25:23

BAT 10-3:

Committed at 01/19/2022 09:39:55, On Scene at 01/19/2022 10:31:41, Returning at 01/19/2022 15:54:46, Released at 01/19/2022 16:12:17, Committed at 01/20/2022 09:22:29, Returning at 01/20/2022 15:41:08, Released at 01/20/2022 16:19:42, Committed at 01/21/2022 09:44:05, Released at 01/21/2022 12:02:41, Committed at 02/01/2022 08:54:27, On Scene at 02/01/2022 10:30:11, Returning at 02/01/2022 11:35:26, Released at 02/01/2022 13:00:41, Committed at 02/10/2022 10:13:38, On Scene at 02/10/2022 12:02:23, Released at 02/10/2022 14:44:53, Committed at 02/19/2022 08:54:06, Released at 02/19/2022 13:29:47

CAPT 631:

Committed at 01/19/2022 09:32:27, On Scene at 01/19/2022 10:31:41, Returning at 01/19/2022 14:40:30, Released at 01/19/2022 15:54:35

PAT 10-3:

Committed at 01/20/2022 09:22:29, Returning at 01/20/2022 15:41:08, Released at 01/20/2022 16:19:42, Committed at 01/21/2022 09:44:05, Released at 01/21/2022 12:02:41, Committed at 02/19/2022 08:54:06, Released at 02/19/2022 13:29:47

Entry Date/Time	From	To	Details
01/19/2022 09:32:41	CAPT 631	(b) (6), (b) (7)(C)	Enrt
01/19/2022 09:39:48	BAT 10-3		Enrt w/ PAT 10-3
01/19/2022 10:31:09	RXBB		Test fire successful continuing with ignitions
01/19/2022 10:31:21	(b) (6), (b) (7)(C)	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful continuing with ignitions Sent to: Jemez District group
01/19/2022 12:26:26	RXBB	(b) (6), (b) (7)(C)	Completed ignitions for the day // do you have ac // will get back with you
01/19/2022 12:26:37	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day Sent to: Jemez District group
01/20/2022 10:37:27	RXBB	AJL	Initiating test fire.
01/20/2022 10:48:29	RXBB	AJL	Test fire successful, continuing with ignitions.. With vent being what it is, will light a handful of piles, shouldn't take too long.
01/20/2022 10:50:35	AJL	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful. Continuing with ignitions. Sent to: Jemez District group

Entry Date/Time	From	To	Details
01/20/2022 12:01:29	RXBB	AJL	Completed ignitions for the day.
01/20/2022 12:02:01	AJL	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day. Sent to: Jemez District group
01/21/2022 09:44:30	BAT 10-3	AJL	ER w/Pat 10-3
01/21/2022 12:02:28	PAT 10-3	AJL	No issues no concerns, smoldering with minimal smoke / back at station
01/21/2022 13:27:19	AJL		Acres set to 100
02/01/2022 08:54:45	BAT 10-3	TGF	Enrt w/ PAT 10-3 and 3-31
02/01/2022 10:12:13	BAP 10-3	TGF	On scene and briefed up starting test fire
02/01/2022 10:29:48	RXBB	TGF	Test fire successful continuing with ignitions ventilations are poor so not going to burn for too long
02/01/2022 10:30:05	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful continuing with ignitions Sent to: Jemez District group
02/01/2022 11:36:00	RXBB	TGF	Completed ignitions for the day of 50 ac
02/01/2022 11:36:14	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day of 50 ac Sent to: Jemez District group
02/10/2022 10:13:11	BAT 10-3	TGF	Enrt
02/10/2022 11:37:21	BAT 10-3	TGF	On scene all resources briefed starting the test fire
02/10/2022 11:38:38	RXBB	TGF	Test fire successful continuing with ignitions
02/10/2022 11:38:55	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Test fire successful continuing with ignitions Sent to: Jemez District group
02/10/2022 12:38:30	RXBB	TGF	Completed ignitions for the day of 50 ac
02/10/2022 12:39:11	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the day of 50 ac Sent to: Jemez District group
02/19/2022 08:53:27	BAT 10-3	TGF	Enrt w/ PAT 10-3
02/19/2022 08:53:40	DIV 10-3	TGF	Enrt
02/19/2022 09:47:13	RXBB	TGF	Starting test fire
02/19/2022 11:13:58	RXBB	TGF	Completed ignitions of the whole burn unit for 709 acs will stick around for a little longer
02/19/2022 11:14:59	TGF	Email	Email SNF-2022-17 Pino West Piles Rx: Completed ignitions for the whole Pino West Rx today for a total of 709 ac Sent to: Jemez District group
02/19/2022 11:15:07	TGF		Acres set to 709

VOR	ATB	Helibase
30nm 286° SAF: SANTA FE V	44nm 348° ABQ: ALBUQUERQU	7nm 136° FEN: FENTON HIL
45nm 000° ABQ: ALBUQUERQU	72nm 265° LVS: LAS VEGAS	7nm 138° FEN: FENTON HIL
46nm 000° ABQ: ALBUQUERQU	99nm 134° DRO: DURANGO	14nm 250° TA49: TA-49 HEL
48nm 350° ILT: ISLETA NDB	171nm 313° ROW: ROSWELL AT	17nm 241° LAM: LOS ALAMOS
54nm 310° OTO: OTTO VOR	179nm 339° ALM: ALAMOGORDO	44nm 334° SAND: SANDIA HE

Initial Report On Conditions

Fuels: Acres: W Speed: Dir: Slope: Aspect:

Spread: Complexity: Jurisdiction:

Structures:

Initial Strategy: N/A

Fire Report Information

Fire #: SubUnit: SubUnit #:

Acres: 709 Size Class: E Elevation: Land Status:

Contain: Control: Out:

Statistical Cause: Specific Cause:

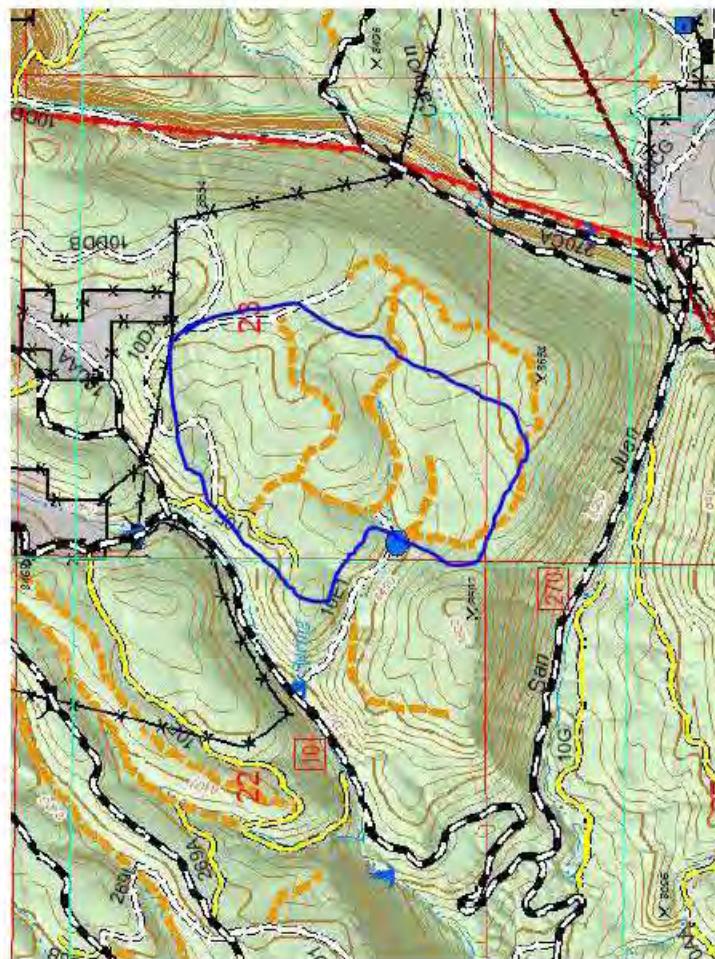


EXHIBIT #: 4

TITLE: Photograph Logs

CASE NUMBER: 23-03-IAIP004



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 1 IMG-3162

Date: 4/22/2022

Time: 3:54 PM

Photographer: (b) (6), (b) (7)(C)

Subject: First photograph USFS Fire Lookout (b) (6), (b) (7)(C) took of the Cerro Pelado Wildfire.



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 2 IMG-3163

Date: 4/22/2022

Time: 4:27 PM

Photographer: (b) (6), (b) (7)(C)

Subject: Second photograph USFS Fire Lookout (b) (6), (b) (7)(C) took of the Cerro Pelado Wildfire.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

See Video

Photograph Number: 3 IMG-3164

Date: 4/22/2022
Time: Between 4:27 PM and 4:40 PM
Photographer: (b) (6), (b) (7)(C)
Subject: Video of Cerro Pelado Wildfire.

**Photograph Number:** 4 IMG-3165

Date: 4/22/2022
Time: 4:40 PM
Photographer: (b) (6), (b) (7)(C)

Subject:



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

EXHIBIT I

Cerro Pelado LOOKOUT INCIDENT REPORT

Always record 1. Date 4/22/2022 Time 1530
for your reference.

2. Azimuth 255 at 2 miles.

3. Legal description T. 18N R. 3E Sec. 23 E

4. Base of Smoke Sighted YES NO ✓

5. Location by Landmarks FR 10D and 270

Always read items #2 thru 6 when giving initial fire report to Dispatcher.

6. Smoke description

a. Volume b. Color c. Character

Small <input checked="" type="checkbox"/>	White <input type="checkbox"/>	Thin <input checked="" type="checkbox"/>
Medium <input type="checkbox"/>	Gray <input type="checkbox"/>	Heavy <input type="checkbox"/>
Large <input type="checkbox"/>	Blue <input checked="" type="checkbox"/>	Billowy <input type="checkbox"/>
Black <input type="checkbox"/>	Drift <input type="checkbox"/>	
Yellow <input type="checkbox"/>	Blanket <input type="checkbox"/>	
Coppery <input type="checkbox"/>	Other <input type="checkbox"/>	

d. Direction from which smoke is drifting NE

Always Report 7. Any MAJOR change in smoke appearance _____
i.e., increase or decrease in volume, change in color,
if it disappears.....

Always record 8. Cross Reading Lookout N/A Azimuth N/A
for your reference.

9. If lightning caused: record date and time of last lightning in the area (if known) 4/21/25

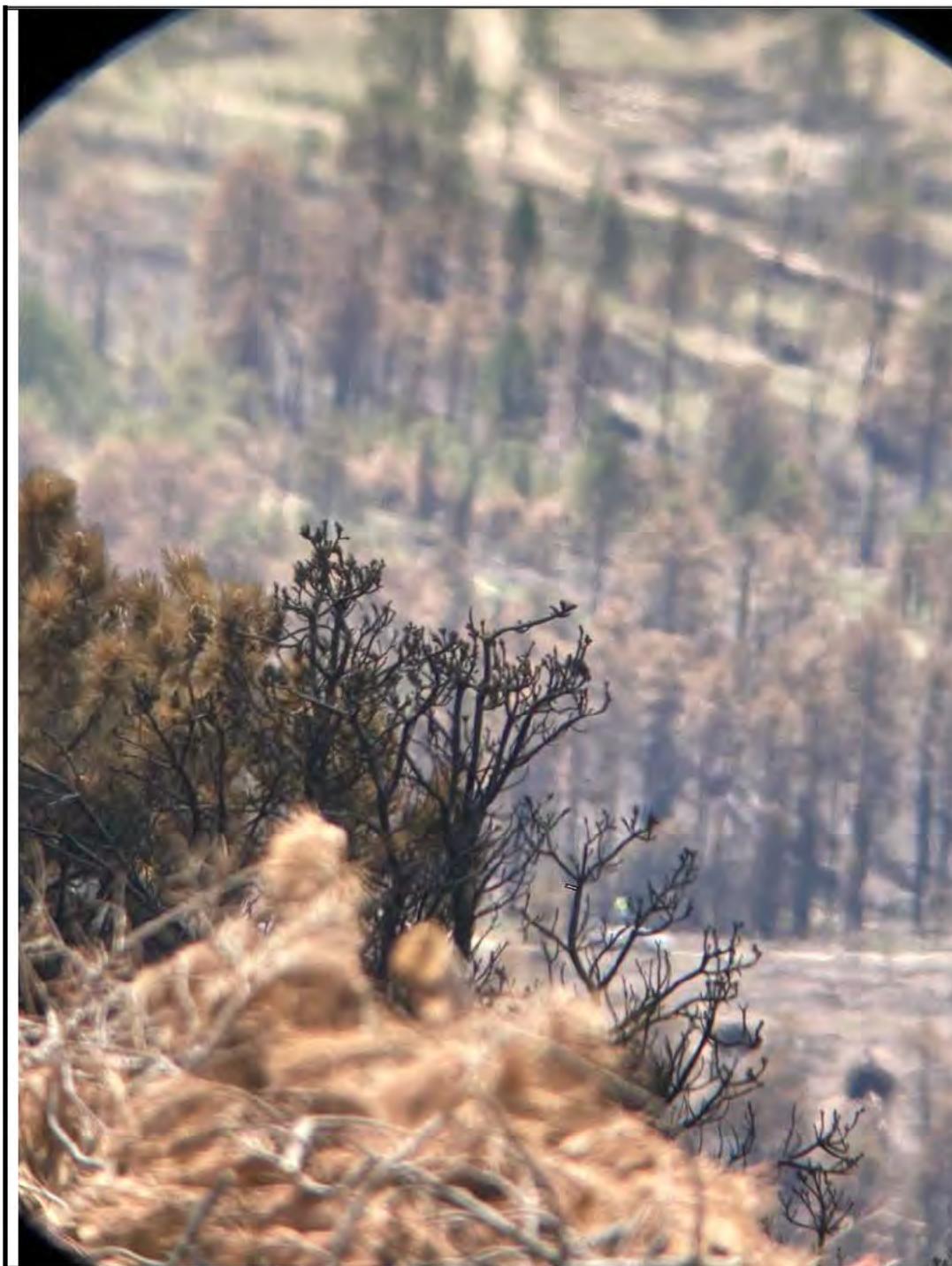
10. Name of Person Staffing Lookout (b) (6), (b) (7)(C)

Photograph Number: 5 IMG-0560
Date: 6/5/2022
Time: 1101
Photographer: SA (b) (6), (b) (7)(C)
Subject: Cerro Pelado Lookout Incident Report



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 6 IMG-0565

Date: 6/6/2022

Time: 1354

Photographer: SA (b) (6), (b) (7)(C)

Subject: Photo from Lookout tower with SA (b) (6), (b) (7)(C) standing on his pickup with green traffic vest on where head fire advanced out of drainage onto the ridge line.



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 7 IMG-0566

Date: 6/6/2022

Time: 1354

Photographer: SA (b) (6), (b) (7)(C)

Subject: Photo from Lookout tower with SA (b) (6), (b) (7)(C) standing on his pickup with green traffic vest on where head fire advanced out of drainage onto the ridge line



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022





**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 9 IMG-0568

Date: 6/6/2022

Time: 1354

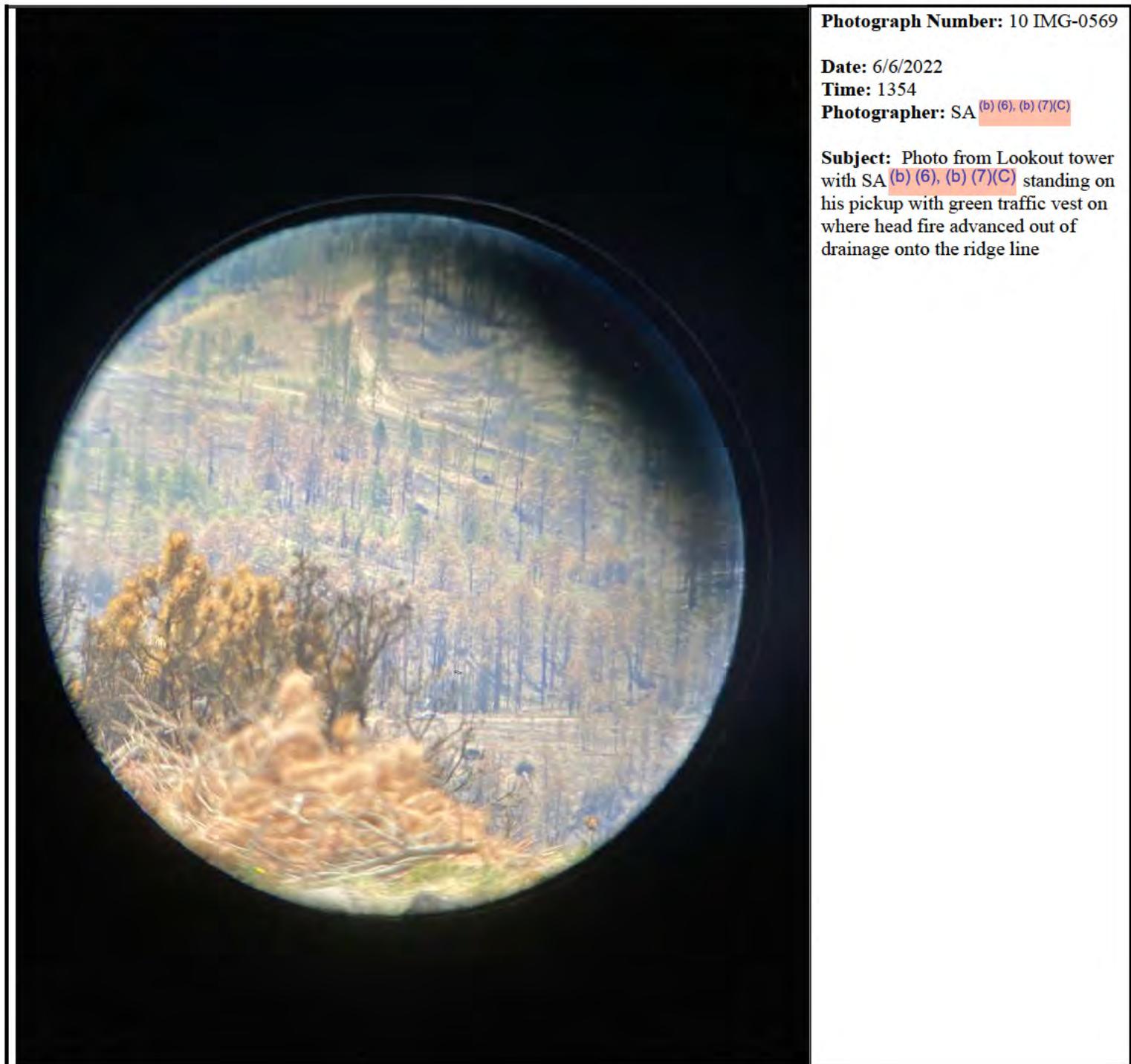
Photographer: SA (b) (6), (b) (7)(C)

Subject: Photo from Lookout tower with SA (b) (6), (b) (7)(C) standing on his pickup with green traffic vest on where head fire advanced out of drainage onto the ridge line



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022





United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 11 IMG-0570

Date: 6/6/2022

Time: 1356

Photographer: SA (b) (6), (b) (7)(C)

Subject: Overall view from Lookout Tower where previous photographs were taken through spotting scope.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 1

Date: 6/8/2022

Time: 0947

Photographer: SA (b) (6), (b) (7)(C)

Subject: Measurement Reference Point



Photograph Number: 2

Date: 6/8/2022

Time: 0957

Photographer: SA (b) (6), (b) (7)(C)

Subject: Overall from heel facing south. Remains of logging slash pile constructed at base of incline. Initial advancing run progressing upslope.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

**Photograph Number: 3****Date:** 6/08/2022**Time:** 0957**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Overall from heel facing southwest. Initial right flank paralleled two track road. Remains of logging slash pile constructed at base of incline. Initial advancing run progressing upslope.

**Photograph Number: 4****Date:** 6/8/2022**Time:** 0957**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Overall from heel facing southeast. Remains of logging slash pile constructed at base of incline. Initial advancing run progressing upslope. Smoke can be seen rising from southeast corner of slash pile remains.



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 5

Date: 6/8/2022

Time: 0959

Photographer: SA (b) (6), (b) (7)(C)

Subject: Backing indicators on northern edge of the remains of the slash pile.



Photograph Number: 6

Date: 6/8/2022

Time: 1000

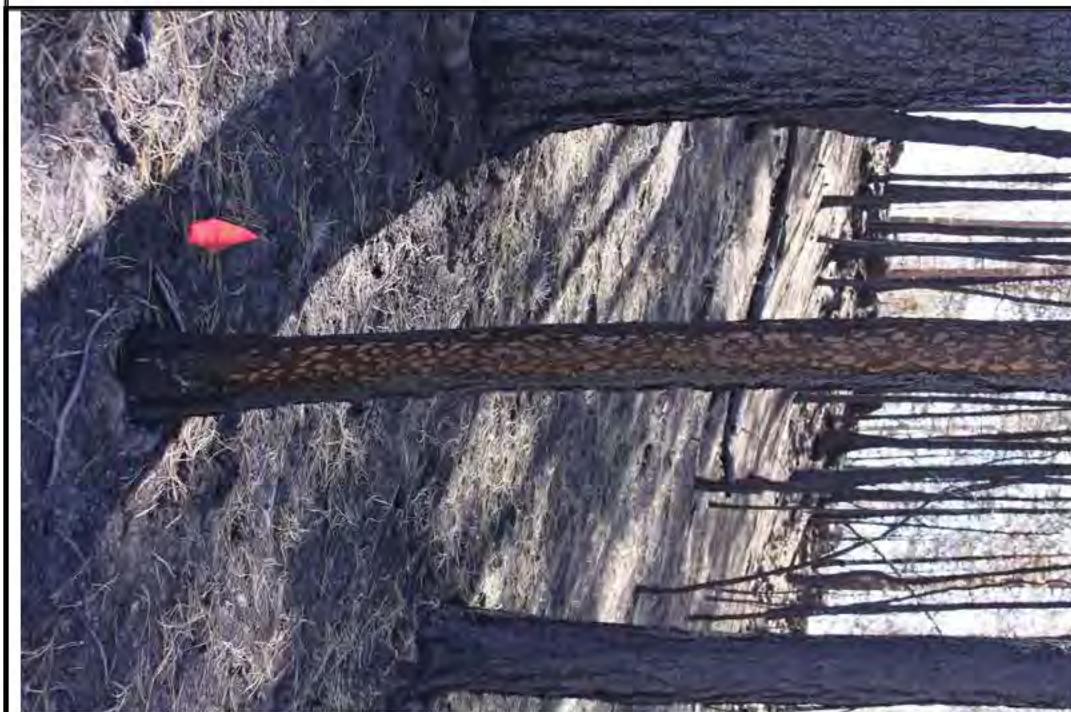
Photographer: SA (b) (6), (b) (7)(C)

Subject: Intermediate photograph of backing indicator. Indicator is partially covered by new growth.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

**Photograph Number:** 7**Date:** 6/8/2022**Time:** 1000**Photographer:** SA (b) (6), (b) (7)(C)**Subject:** Close up of backing indicator.**Photograph Number:** 8**Date:** 6/8/2022**Time:** 1001**Photographer:** SA (b) (6), (b) (7)(C)**Subject:** High degree of visible charring (on this indicator it appears more like blistering) with higher damage differential on side of tree facing the slash pile.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	<p>Photograph Number: 9</p> <p>Date: 6/8/2022 Time: 1002 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Opposite side of tree depicted in Photograph Number 8. Remains of slash pile observed in background.</p>
	<p>Photograph Number: 10</p> <p>Date: 6/8/2022 Time: 1003 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Remains of two tree bases within primary advancing run. Significant charring and cupping observed on side of tree facing slash pile.</p>



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 11

Date: 6/8/2022

Time: 1003

Photographer: SA (b) (6), (b) (7)(C)

Subject: Side profile of indicators depicted in Photograph Number 10.



Photograph Number: 12

Date: 6/8/2022

Time: 1004

Photographer: SA (b) (6), (b) (7)(C)

Subject: Upslope side of tree bases depicted in Photograph Numbers 10 and 11.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

**Photograph Number: 13****Date:** 6/8/2022**Time:** 1004**Photographer:** SA (b) (6), (b) (7)(C)**Subject:** Top view of tree base depicted in Photograph Numbers 10, 11, and 12.**Photograph Number: 14****Date:** 6/8/2022**Time:** 1004**Photographer:** SA (b) (6), (b) (7)(C)**Subject:** Top view of tree base depicted in Photograph Numbers 10, 11, and 12.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

**Photograph Number: 15****Date:** 6/8/2022**Time:** 1005**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Cluster of fire pattern indicators within the advancing head fire of the fire upslope of the remains of the

**Photograph Number: 16****Date:** 6/8/2022**Time:** 1007**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Depth of char and damage differential on remains of small diameter pine tree.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	<p>Photograph Number: 17</p> <p>Date: 6/8/2022 Time: 1007 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Opposite side of indicator depicted in Photograph Number 17. Remains of slash pile in background.</p>
	<p>Photograph Number: 18</p> <p>Date: 6/8/2022 Time: 1008 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Transition Zone on Right Flank. Transition from Advancing fire to Lateral Fire.</p>



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

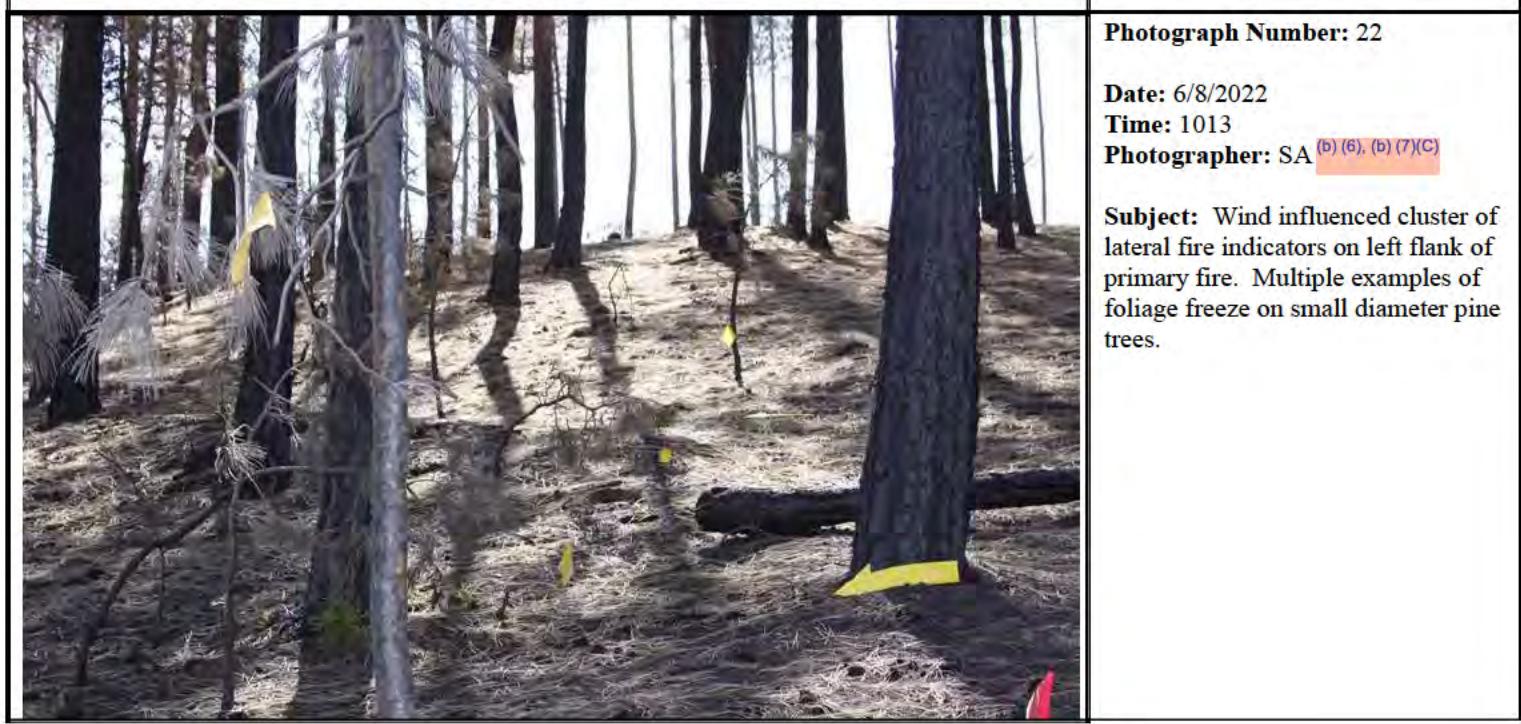
Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022





**United States Department of Agriculture
Forest Service**
Photograph Exhibit

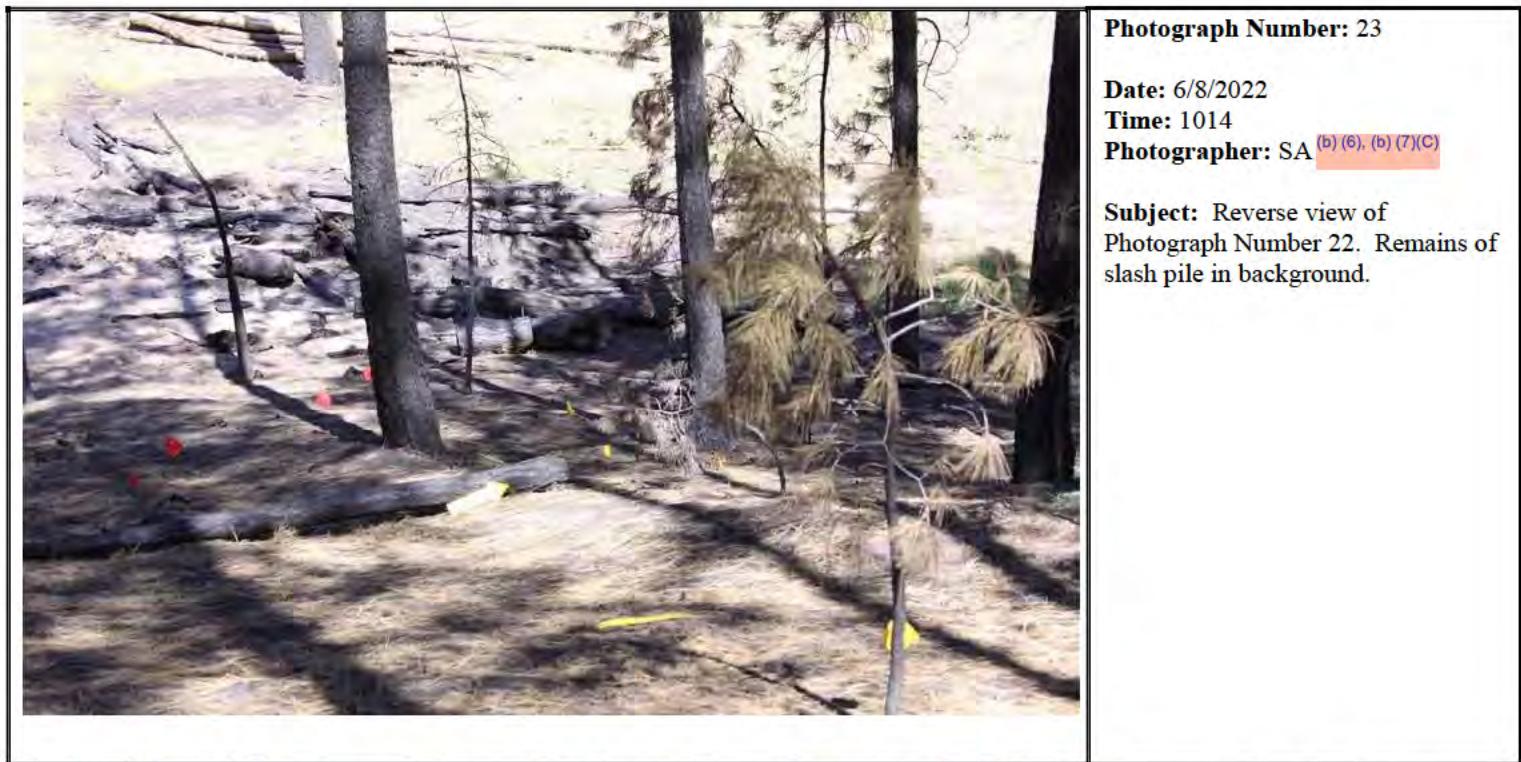
Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022





**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Ca Type	Date of Incident
Wildfire	4/22/2022





**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 25

Date: 6/8/2022

Time: 1016

Photographer: SA (b) (6), (b) (7)(C)

Subject: Close up of spalling and sooting on large rock within primary advancing run.



Photograph Number: 26

Date: 6/8/2022

Time: 1017

Photographer: SA (b) (6), (b) (7)(C)

Subject: Opposite view of Photograph Numbers 24 and 25.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

**Photograph Number:** 27**Date:** 6/8/2022**Time:** 1025**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Facing north from center of primary run originating from second slash pile east of first slash pile.

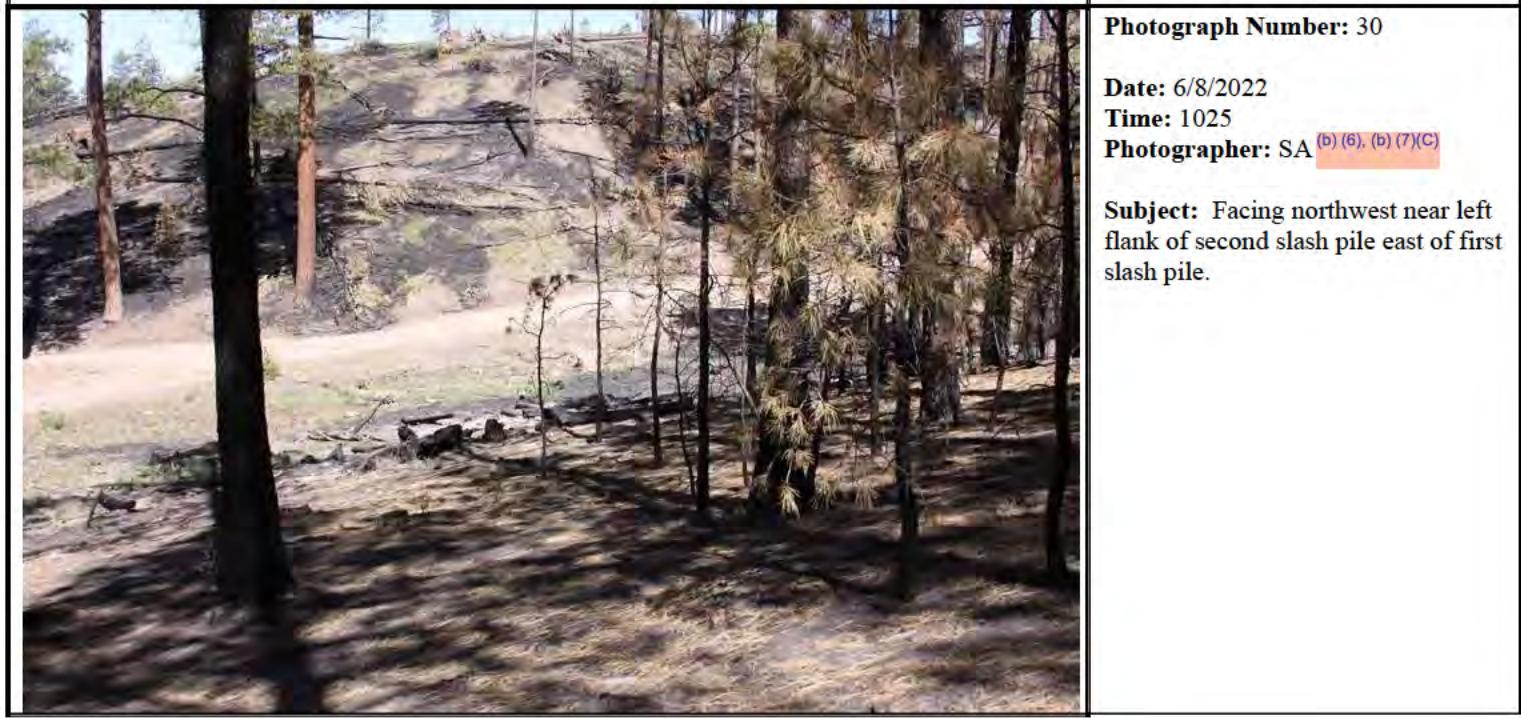
**Photograph Number:** 28**Date:** 6/8/2022**Time:** 1025**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Facing south from primary advancing run originating from second slash pile east of first slash pile.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022





**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	Photograph Number: 31 Date: 6/8/2022 Time: 1026 Photographer: SA (b) (6), (b) (7)(C) Subject: Foliage freeze on left flank on second slash pile east of the first slash pile.
	Photograph Number: 32 Date: 6/8/2022 Time: 1026 Photographer: SA (b) (6), (b) (7)(C) Subject: Facing northwest depicting advancing fire originating from second slash pile.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

**Photograph Number:** 33**Date:** 6/8/2022**Time:** 1026**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Facing northwest depicting heel near the remains of the second slash pile.

**Photograph Number:** 34**Date:** 6/8/2022**Time:** 1026**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Facing northeast on left flank on second slash pile. Note foliage freeze on branches of pine trees and needles.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

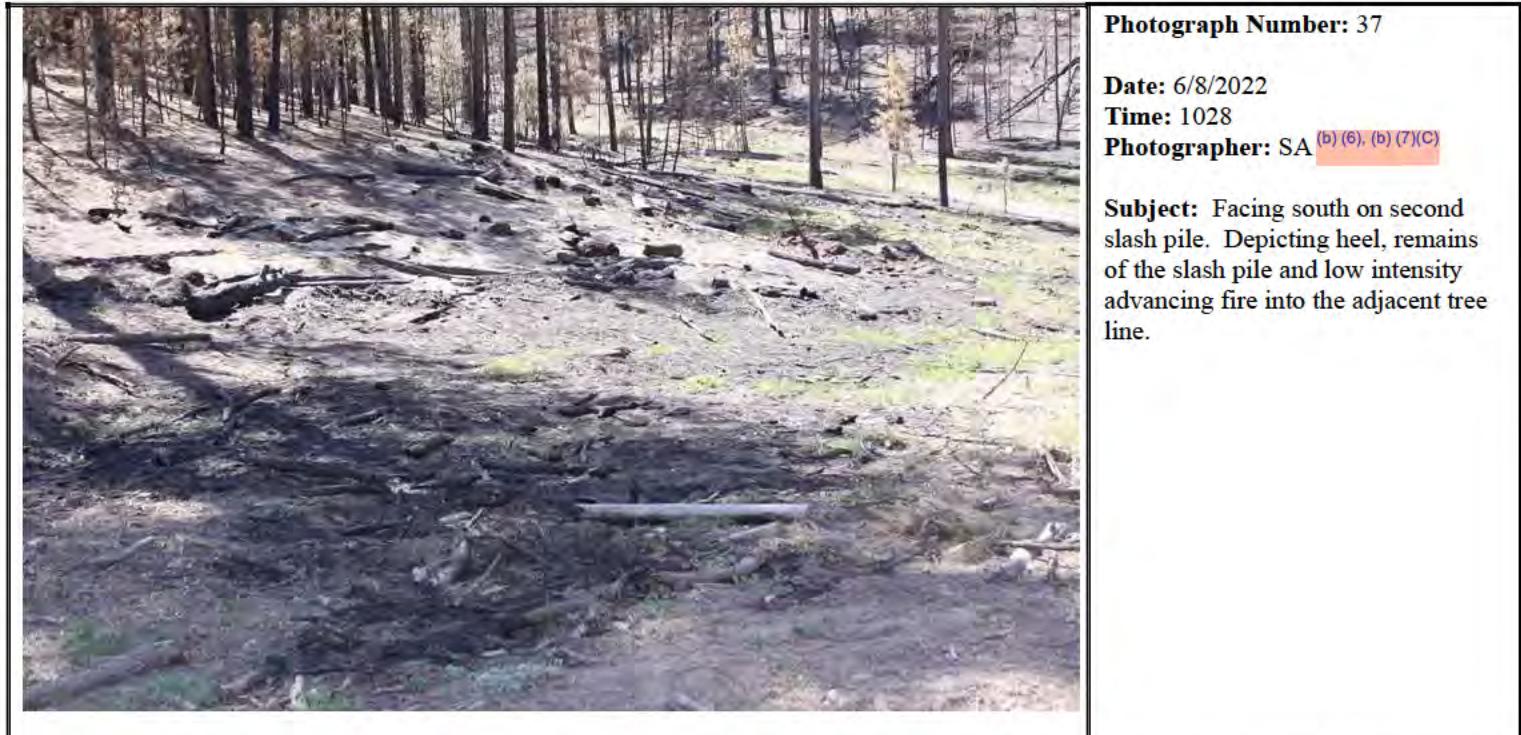
Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022





**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022





**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

**Photograph Number:** 39**Date:** 6/8/2022**Time:** 1058**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Metal spade placed in to smoldering ash, logging litter, and soil mixture on southwest corner of first slash pile depicted in this photolog. Note black mark on shaft of the spade estimating depth where spade was placed. SA (b) (6), (b) (7)(C) was unable to reach deepest part of this smoldering pile due to extreme heat within the pile.

**Photograph Number:** 40**Date:** 6/8/2022**Time:** 1100**Photographer:** SA (b) (6), (b) (7)(C)

Subject: Depth of the pile where measurement was taken was approximately 23 ¾ inches deep. Shovel was so hot after removing it from the pile SA (b) (6), (b) (7)(C) felt the extreme heat in the handle through heavy leather gloves.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

 	<p>Photograph Number: 1</p> <p>Date: 6/9/2022</p> <p>Time: 1015</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing southwest. Depicting left flank lower left/center of photograph. Burn out operations depicted on center/right side of photograph.</p> <p>2022_06_09</p> <p>Photograph Number: 2</p> <p>Date: 6/9/2023</p> <p>Time: 1015</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing southwest. Depicting left flank lower left/center of photograph. Burn out operations depicted on center/right side of photograph</p> <p>2022_06_09</p>
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**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	<p>Photograph Number: 3</p> <p>Date: 6/9/2022 Time: 1015 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing southwest. Depicting left flank lower left/center of photograph. Burn out operations depicted on center/right side of photograph</p>
	<p>Photograph Number: 4</p> <p>Date: 6/9/2022 Time: 1015 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing southwest. Depicting left flank lower left/center of photograph. Burn out operations depicted on center/right side of photograph</p>



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	Photograph Number: 5 Date: 6/9/2022 Time: 1016 Photographer: SA (b) (6), (b) (7)(C) Subject: Facing north. Depicting general origin area in lower center area of photograph.
	Photograph Number: 6 Date: 6/9/2022 Time: 1016 Photographer: SA (b) (6), (b) (7)(C) Subject: Facing northeast. Depicting general origin area lower center of the photograph.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

 	<p>Photograph Number: 7</p> <p>Date: 6/9/2022</p> <p>Time: 1016</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing northeast. General origin area lower left corner of photograph. Burnout operations to the north and northeast.</p>
	<p>Photograph Number: 8</p> <p>Date: 6/9/2023</p> <p>Time: 1016</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing northeast. Burnout operations to the north and northeast.</p>



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	<p>Photograph Number: 9</p> <p>Date: 6/9/2022 Time: 1016 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing northeast. Depicting general origin area center left edge of photograph. Left flank depicted in foreground traversing to the top of the photograph.</p>
	<p>Photograph Number: 10</p> <p>Date: 6/9/2022 Time: 1016 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing east. Depicting probable 2nd specific origin area. And associated advancing fire and left flank.</p>



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	<p>Photograph Number: 11</p> <p>Date: 6/9/2022</p> <p>Time: 1016</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing east. Depicting left flank and left side of run.</p>
	<p>Photograph Number: 12</p> <p>Date: 6/9/2022</p> <p>Time: 1016</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing south. Depicting advancing fire originating from specific origin areas.</p>



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	Photograph Number: 13 Date: 6/9/2022 Time: 1017 Photographer: SA (b) (6), (b) (7)(C) Subject: Facing south. Depicting advancing fire originating from specific origin areas.
	Photograph Number: 14 Date: 6/9/2022 Time: 1017 Photographer: SA (b) (6), (b) (7)(C) Subject: Facing southwest. Depicting burnout operations.



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	Photograph Number: 15 Date: 6/9/2022 Time: 1017 Photographer: SA <small>(b) (6), (b) (7)(C)</small> Subject: Facing southwest. Depicting left flank lower left/center of photograph. Burn out operations depicted on center/right side of photograph.
	Photograph Number: 16 Date: 6/9/2022 Time: 1017 Photographer: SA <small>(b) (6), (b) (7)(C)</small> Subject: . Facing southwest. Depicting left flank lower left/center of photograph. Burn out operations depicted on center/right side of photograph



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	<p>Photograph Number: 17</p> <p>Date: 6/9/2022</p> <p>Time: 1017</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing east. Advancing fire and left flank.</p>
	<p>Photograph Number: 18</p> <p>Date: 6/9/2022</p> <p>Time: 1018</p> <p>Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing east. Advancing fire and left flank</p>



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

	<p>Photograph Number: 19</p> <p>Date: 6/9/2022 Time: 1018 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing north. Depicting burnout operations.</p>
	<p>Photograph Number: 20</p> <p>Date: 6/9/2022 Time: 1018 Photographer: SA (b) (6), (b) (7)(C)</p> <p>Subject: Facing southeast. Advancing fire run originating at two specific origin areas.</p>



**United States Department of Agriculture
Forest Service**
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022

 2022/06/09	Photograph Number: 21 Date: 6/9/2022 Time: 1018 Photographer: SA (b) (6), (b) (7)(C) Subject: Facing south. Depicting advancing fire originating from specific origin areas.
 2022/06/09	Photograph Number: 22 Date: 6/9/2022 Time: 1018 Photographer: SA (b) (6), (b) (7)(C) Subject: Facing south. Depicting advancing fire originating from specific origin areas.



United States Department of Agriculture
Forest Service
Photograph Exhibit

Case Name	Case/File Number
Cerro Pelado Wildfire	IAIP004
Case Type	Date of Incident
Wildfire	4/22/2022



Photograph Number: 23

Date: 6/9/2022

Time: 1017

Photographer: SA (b) (6), (b) (7)(C)

Subject: Facing west. Specific origin area left/center side of photograph.

EXHIBIT #: 5

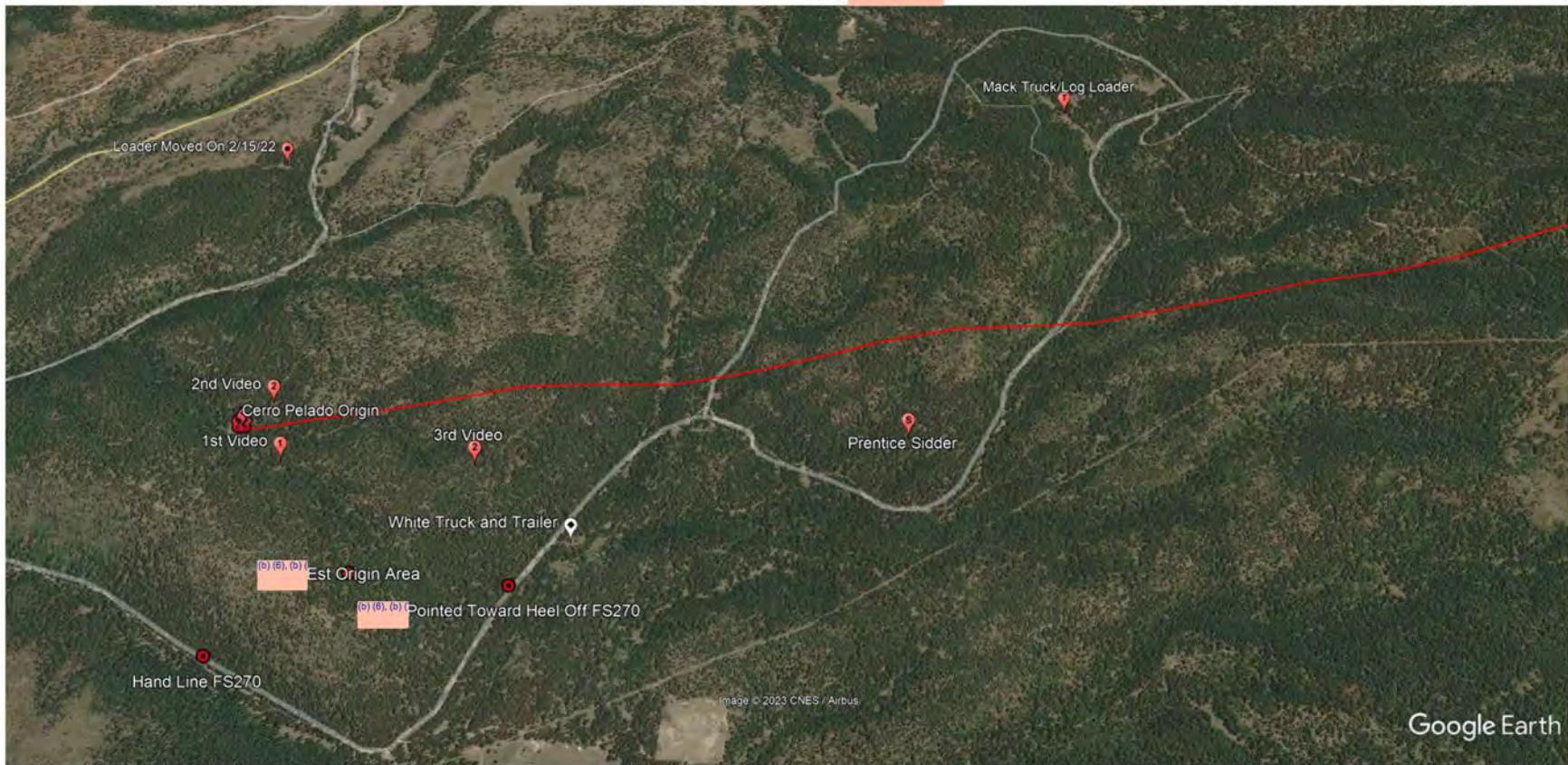
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CASE NUMBER: 23-03-IAIP004

Cerro Pelado Fire Google Earth Map

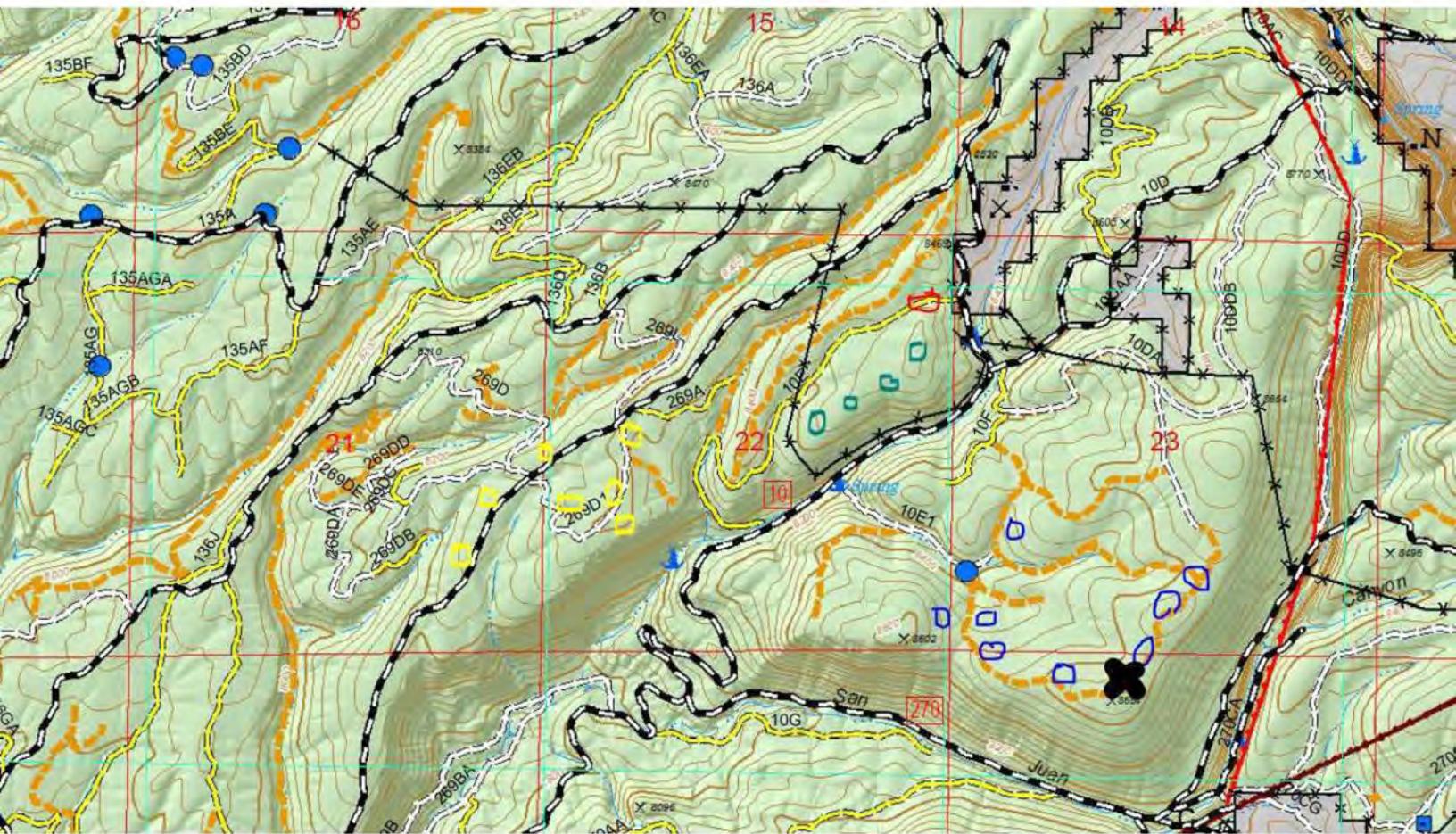
(b) (6), (b) (7)(C)

SA



(b) (6), (b) (7)(C), 5/9/2023

Estimated Origin FS Personnel



● X: Estimated Origin

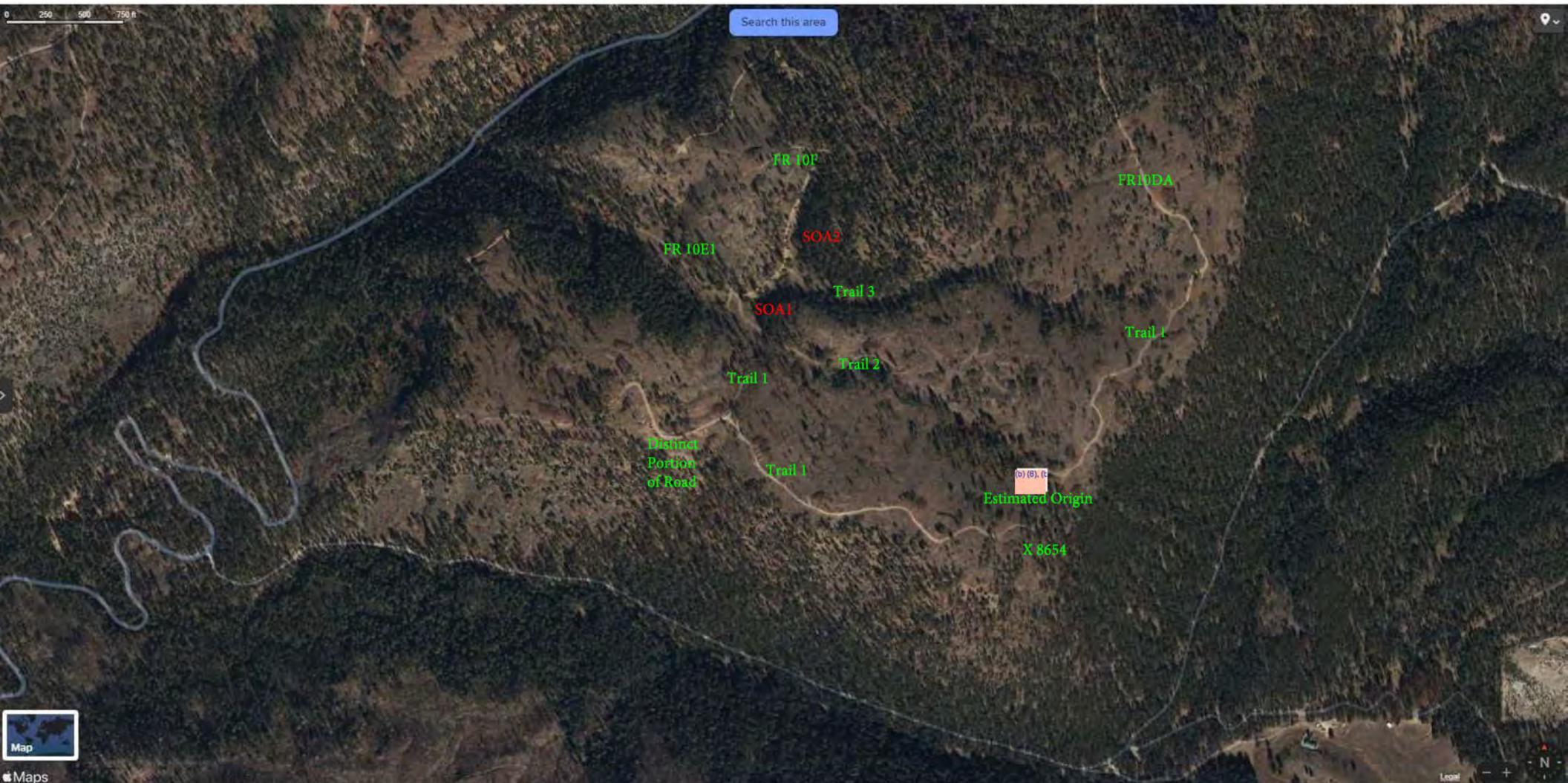
O-1/19-20

□ - 2/1

0 - 2/10

0-2/19

Roads
SA Lunders



Edits by (b) (6), (b) (7)(C)
5/9/2023



IMG-3162

Hilltop
X 8654

(b) (6), (b)

Estimated
Origin

Distinct
Portion of
Road

(b) (6), (b) (7)(C) 5/9/2023

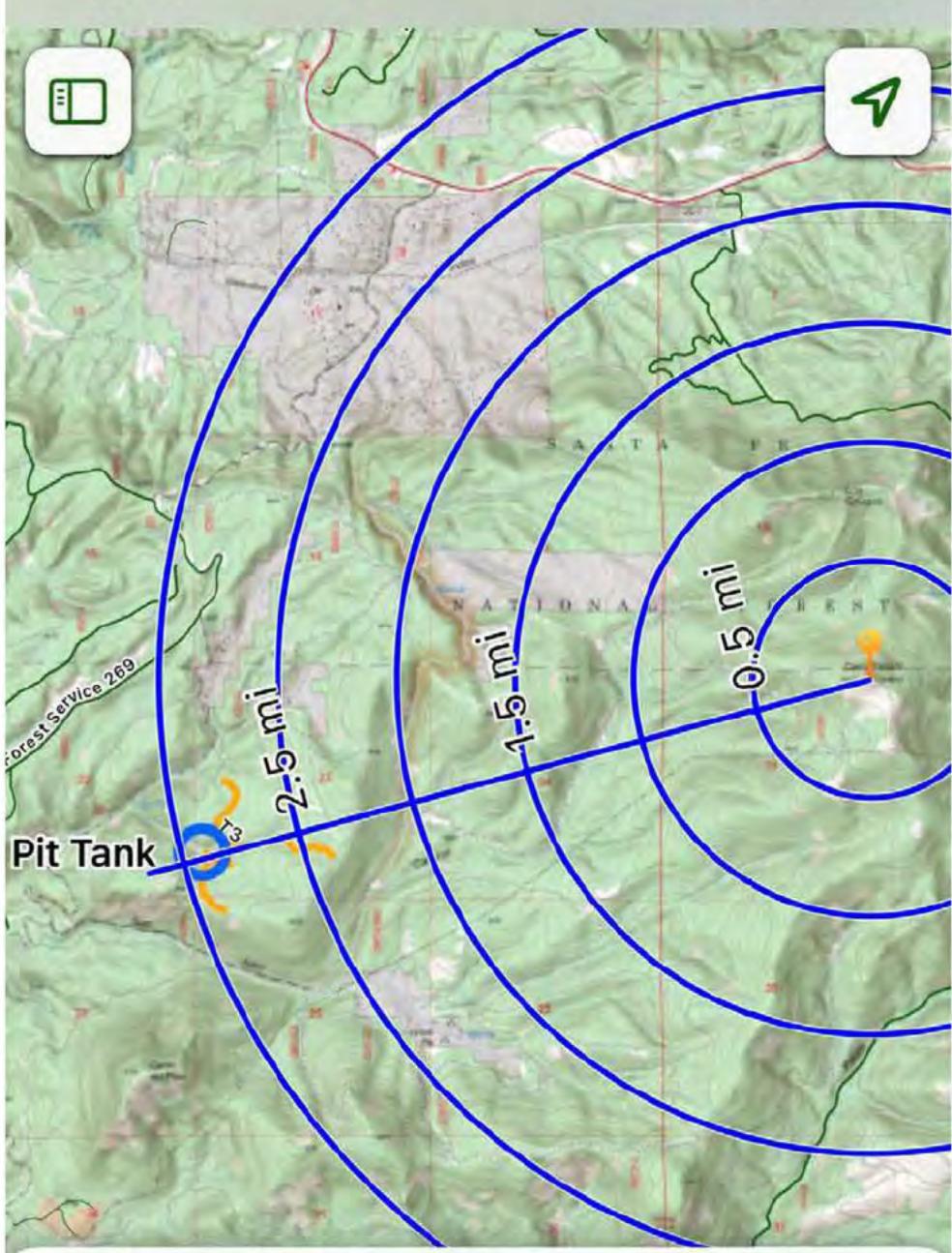
00226

IMG-3165



(b) (6), (b) (7)(C), 5/9/2023

USDA Forest Service		Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)				Incident Number	IAIP004
						Incident Date	04/22/2022
Fire Name	Cerro Pelado						
Latitude	35°	46'	25"	Longitude	106°	35'	55"
						Datum	WGS 84
FIRE SCENE SKETCH (INCLUDE SCALE, TITLE, AUTHOR, NORTH ARROW, DATE AND TIME)							
<p>The map shows a topographic surface with contour lines and elevation values. A red polygon represents the fire perimeter. Two red arrows point from the text labels to specific locations on the map: one pointing towards the center labeled '255 Degree Azimuth To Reported Smoke' and another pointing towards the bottom right labeled 'Wind 218 30 MPH+'. Other labels on the map include 'SOA1' and 'SOA2' with red arrows, 'X' at the estimated origin, and 'O' at the intersection of Trail 1 and FR 10DA.</p>							
<p>Additional information added by (b) (6), (b) (7)(C) on May 8, 2023:</p> <p>X: Approximate location of the Estimated Origin.</p> <p>O: Approximate location for SA (b) (6), (b) (7)(C) at the intersection of Trail 1 and FR 10DA.</p> <p>SOA1: Red arrow, approximate location of the SOA identified by Cooksey and SA (b) (6), (b) (7)(C).</p> <p>SOA2: Red arrow, approximate location of the SOA identified by SA (b) (6), (b) (7)(C).</p>							
SCALE	NOT TO SCALE	AUTHOR	SA (b) (6), (b) (7)(C)	DATE	6/8/2022	TIME	0900



Line of Sight at 255° W



Feet Yards Miles

Range Rings



Distance: 3.16 miles

(b) (5), (b) (7)(C), 5/9/2022

Profile & Line of Sight Analysis

Tap on the map for line of sight to that point

00229

